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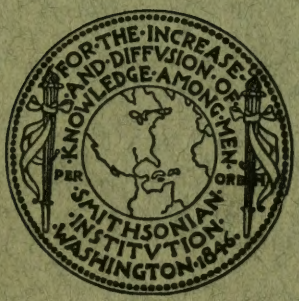
AN INTRODUCTION TO THE CERAMICS OF TRES ZAPOTES VERACRUZ, MEXICO

By
C. W. WEIANT



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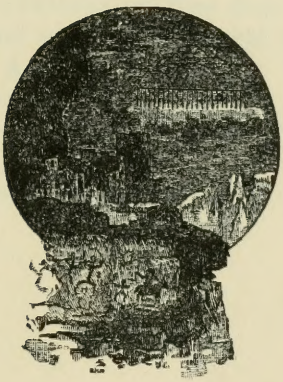

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LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
BUREAU OF AMERICAN ETHNOLOGY,
Washington, D. C., November 16, 1942.

SIR: I have the honor to transmit herewith a manuscript entitled "An Introduction to the Ceramics of Tres Zapotes, Veracruz, Mexico," by C. W. Weiant, and to recommend that it be published as a bulletin of the Bureau of American Ethnology.

Very respectfully yours,

M. W. STIRLING, *Chief.*

DR. C. G. ABBOT,
Secretary of the Smithsonian Institution.

CONTENTS

	PAGE
Preface	xi
Introduction	1
Description of the archeological zone	1
The Cabeza Group	2
The Ranchito Group	3
The Arroyo Group	3
The North Group	3
The excavations	6
The Cabeza Colosal	6
Cabeza Group, Mound E	6
Stela A	7
Ranchito Group	7
Zone of the burials	7
Mound A	9
Mound C	9
Mound D and adjacent areas	10
Miscellaneous excavations	11
Mounds J and K	11
Mound F	12
Arroyo Group	12
The Plaza	12
The Long Mound (C)	13
Mound G (the Stone Platform)	13
Mound F	14
Mound B	14
Mounds I and J	15
Part 1. The pottery	16
Middle Tres Zapotes A: Classification	16
I. Unslipped or partially slipped wares	16
II. Monochrome wares	17
III. Dichrome (Red-and-White Incised) ware	19
Middle Tres Zapotes B: Classification	19
I. Unslipped or partially slipped wares	19
II. Monochrome wares	20
III. Wares with painted decoration	21
Upper Tres Zapotes: Classification	22
I. Unslipped or partially slipped wares	23
II. Monochrome wares	26
III. Pseudodichrome wares	29
IV. Dichrome wares	30
V. Pseudotrichrome wares	30
VI. Trichrome wares	31
The general Ranchito collection	55
Wares and their relative frequency	55
Classification and enumeration of sherds with painted decoration	56

Part 1. The pottery—Continued.
The general Ranchito collection—Continued. PAGE
Forms and sizes of vessels 60
Forms of support 63
Handles 68
Spouted vessels 68
Distribution of forms according to ware 68
Decorative techniques other than painting 69
Miscellaneous and aberrant specimens 76
Specimens of special value for comparative purposes 80
Part 2. The figurines 84
Tres Zapotes figurines of archaic type 84
Classic Pointed-chin type (pls. 1, 2) 84
Classic Prognathous type (pl. 3) 84
Classic Rectangular-face type (pls. 4, 5) 85
Classic Beatific type (pls. 6, 7) 85
A typical Transitional type (pl. 8) 86
A typical Transitional type (pl. 9) 86
Typical Vaillant's A Type (pls. 10, 11, 12) 87
Typical Grotesque variants (pls. 13, 14) 88
Interrelation of typical types (pl. 15) 89
A Uaxactun type (pls. 16, 17) 90
Baby-faces (pls. 18, 19) 90
Morelos types (pls. 20, 21) 92
Variants (pl. 22) 93
Variants (pl. 23) 93
An aberrant group (pl. 24) 94
Two aberrant groups (pl. 25) 94
Miscellaneous variant and aberrant specimens (pl. 26) 94
Miscellaneous variant and aberrant specimens (pl. 27) 96
Profiles (pl. 28) 96
Early deities (pl. 29) 97
Major archaic types (pl. 30) 97
Unclassified (pl. 31) 98
Bodies (pls. 32–36) 98
Primitive Maya and allied types (pl. 37) 100
Figurines reflecting the high cultures 101
A Teotihuacán type (pl. 38) 101
Some Middle American deities (pl. 39) 102
Miscellaneous figurines (mostly unclassified) (pl. 40) 103
Mold-made Mayoid figurines (pls. 41, 42, 43) 104–106
"Totonac" figurines (pl. 44) 106
Some "Totonac"-Maya comparisons (pl. 45) 107
Whistles and musical instruments 108
Whistles of the Tuxtla region (pl. 46) 108
Ocarinas (pl. 47) 108
Bird effigies (pl. 48) 108
Birds and reptiles (pl. 49) 109
The coati-mundi and unidentified forms (pl. 50) 109
Monkeys and miscellaneous mammals (pls. 51, 52) 110
Tubular instruments (including a panpipe) (pl. 53) 110

PAGE

Part 3. Miscellaneous ceramic material and work in stone 112
Special pottery and figurine fragments 112
Effigy handles (pls. 54, 55) 112
Effigy necks (pl. 56) 112
Sculptured pottery (pl. 57) 113
An effigy vessel, a figurine, and a mask (pl. 58) 114
Miscellaneous vessels, sherds, and pottery objects (pl. 59) 114
Miscellaneous effigies (pl. 60) 115
Limb fragments of jointed and large hollow figurines (pl. 61) 116
Miscellaneous clay objects 116
Seals (pls. 62, 63) 116
Spindle whorls and beads (pl. 64) 117
Ear spools, rings, and beads (pl. 65) 117
Work in stone (pls. 66–78) 118
Stone yokes 118
Metates 118
Stone vessels 118
Stone rings 119
Sling stones 119
Human figures 119
Miscellaneous stone objects 119
Minor stone objects 120
Jade 120
Galena 121
Obsidian 121
Part 4. Synthesis 122
Problems 122
Differential features of Middle Tres Zapotes A and B and Upper Tres Zapotes 122
Q complex elements 124
The archaic question 124
The Olmec question 126
Relations with the Maya Old Empire 127
Relations with the Maya Renaissance 128
Relations with Teotihuacán 128
Relations with Totonacapán 129
Relations with Zapotecan culture 130
Relations with the Mixteca-Puebla culture 131
Relations with the Huaxteca 131
Aztec remains 131
General conclusions 132
Bibliography 133
Appendix. Inventories of representative burials 139
Index 141

ILLUSTRATIONS

PLATES

(All plates at end of book)

1–37. Tres Zapotes figurines.
38–45. Figurines reflecting the high cultures.
46–53. Whistles and musical instruments.
54–65. Miscellaneous ceramic material.
66–78. Work in stone.

TEXT FIGURES

		PAGE
1.	Unslipped or partially slipped wares	32
2.	Black ware, incised before firing	33
3.	Brown ware	33
4.	Black ware, incised after firing	34
5.	Red ware	35
6.	Red-and-White Incised ware	35
7.	Necks of Speckled ware	36
8.	Smothered ware	36
9.	Porous White ware bowl	37
10.	Vessels of Normal White ware	37
11.	Modified Black ware	38
12.	Black ware, incised before firing	39
13.	Black ware, incised after firing	40
14.	Rust-Red vessel	41
15.	Dead-leaf Brown ware bowl	41
16.	Pseudodichrome olla	41
17.	Simple silhouette bowls from surface burials	42
18.	Gourd forms from surface burials	43
19.	Composite silhouette forms from surface burials	44
20.	Miniature vessels from surface burials	45
21.	Black and Dark Brown wares, incised before firing	46
22.	Black Incised ware from surface burials	47
23.	Olla forms from surface burials	48
24.	Surface burial vessels with supports	49
25.	Miscellaneous vessels from surface burials	50
26.	Monochrome, pseudodichrome, and dichrome vessels from surface burials	51
27.	Dichrome, pseudotrichrome, and trichrome vessels from surface burials	52
28.	Miscellaneous vessels from surface burials	53
29.	Miscellaneous specimens from surface burials	54
30.	Sherds with painted designs on inner surface	58
31.	Sherds with painted decoration on outer surface	59
32.	Rim sherds, general Ranchito collection	60
33.	Rim sherds, general Ranchito collection	61

PAGE

34. Rim sherds from necks, general Ranchito collection 62
35. Forms of support, general Ranchito collection 64
36. Forms of support, general Ranchito collection 65
37. Handles of vessels, general Ranchito collection 66
38. Spouted forms and unidentified pottery object, general Ranchito collection 67
39. Incised rims, general Ranchito collection 70
40. Incised rims, general Ranchito collection 71
41. Incised rims, general Ranchito collection 72
42. Incised and modeled rims, general Ranchito collection 73
43. Incised sherds, general Ranchito collection 74
44. Incised sherds, general Ranchito collection 75
45. Incised sherds, general Ranchito collection 76
46. Incised sherds, general Ranchito collection 77
47. Incised sherds, general Ranchito collection 78
48. Incised sherds, general Ranchito collection 79
49. Miscellaneous sherds and pottery objects, general Ranchito collection 80
50. Specimens suggesting alien influence, general Ranchito collection 81
51. Typical designs from "Stick-polished" pottery 82
52. Incised spindle whorls and mold 83
53. Orange and Brown-on-Buff dish from Upper Tres Zapotes level suggesting Mixtec influence 83
54. Miniature vessels 83

MAPS

1. Geographic position of Tres Zapotes in relation to well-known Nahua, Mixtec-Zapotec, and Maya sites 2
2. The Tuxtla region 4
3. Principal mound groups at Tres Zapotes 5
4. West-east section through Mound E, Cabeza Group 6
5. Principal mounds of the Ranchito Group 8
6. North-south section through Mound A, Ranchito Group 9
7. Details of excavation, Mound D, Ranchito Group 11
8. Stratification in Long Mound (C), Arroyo Group 14
9. Plan of Stone Platform, Arroyo Group, Mound G 15
10. Mound G, Arroyo Group, east and west walls 15

PREFACE

The present study seeks to analyze and interpret the ceramic material obtained during the first season's work of the National Geographic Society–Smithsonian Institution joint archeological expedition to Tres Zapotes, State of Veracruz, Mexico. The work of this season was primarily exploratory in nature. Refined stratigraphic investigation was not attempted. It was felt more desirable, as a beginning, to perform as many sampling operations as possible in order to learn fully the character of the site, leaving for a second season the task of determining whether more precise field methods might yield significant results. The interpretations offered are consequently based more upon typological than upon stratigraphic considerations. Nevertheless, certain broad stratigraphic implications emerged in the course of the excavations which have not been lost sight of in the presentation of results. These implications appear to justify arranging the pottery under three general heads indicative of the level at which each of the groupings occurred; namely, Middle Tres Zapotes A, Middle Tres Zapotes B, and Upper Tres Zapotes. This particular terminology has been chosen in the light of the second season's work, which, while confirming the basic stratigraphic categories postulated here, revealed, further, the existence of a deeper and presumably earlier level than any herein considered, which it is proposed to call Lower Tres Zapotes. By adopting designations which can be used in subsequent reports, much unnecessary confusion will be avoided.

In the belief that copious illustration is of greater importance in a report on ceramics than literary elaboration, the text material has been kept at a minimum consistent with the inclusion of the pertinent facts. Description of the pottery is presented in outline form to facilitate quick reference. The terms used in referring to vessel forms have been chosen in accordance with the definitions proposed by Vaillant (1927) in his doctoral dissertation, subject to the minor modifications introduced by the Ricketsons in their report on Uaxactun, Guatemala, Group E, 1926–1931. In addition, the term olla bowl, already familiar to students of Southwestern archeology, has been employed to designate a vessel which conforms to the definition of an olla, except that the height, instead of being approximately equal to the diameter, is definitely less than the diameter. Wares are classified on the basis of surface color or slip. In accordance with the recommendation of Benjamin March (1934), colors have been referred to the standard samples to be found in A Dictionary of Color (Maerz and Paul,

1930). Designations comprise, first, a numeral referring to a plate in the dictionary; second, a letter indicating a vertical file; and third, a numerical denoting a horizontal rank. Thus, 4–C–12, the color of our Orange ware, is to be found in a small square of color on plate 4, where column C and row 12 intersect.

The incompetence shown by the local surveyor employed to map the site has made it necessary to resort to rough approximations in giving the heights of mounds and the distances between them. These measurements have been given in feet. Elsewhere, throughout the text, the metric system has been used.

The figurines have been treated typologically in accordance with a scheme which will be made evident by a glance at the contents. Lest it be objected that the inclusion of so large a representation of variant and aberrant specimens can serve only to bewilder the reader, let it be said that they have been included in order to avoid artificially rigid classificatory distinctions. It is only by careful observation of transitional and variant forms that one is able to sense the essential unity of the main bulk of the figurine material, while often an aberrant specimen becomes a major clue in the maze of spatial and temporal relationships one seeks to clarify.

A full bibliography of all works cited in the text is provided in the list of references at the end of the volume.

The limitations of space prevent acknowledgment of my full indebtedness to all of the people who, in one way or another, have contributed to the success of the expedition and aided me in the labors culminating in the present report. Credit is due, in particular, to the National Geographic Society for their unstinted financial support of the expedition and for the services of Mr. Richard H. Stewart, photographer.

To the Department of Anthropology, Columbia University, I am grateful for the facilities of the laboratory of archeology and for the keen interest and unfailing helpfulness of various members of the staff. I am also indebted to Dr. W. D. Strong for invaluable advice on problems arising in the course of this investigation. The entire project envisaged in the National Geographic Society–Smithsonian Institution expeditions to the Mexican Gulf Coast constitutes one link in a comprehensive plan which Mr. Stirling and Dr. Strong conceived several years ago to attack the problem of the origins of the high cultures in Middle America by investigating peripheral areas. Others in the department who have been of special help include Dr. Gene Weltfish, who made helpful suggestions regarding the classification of wares, and Dr. George Herzog, whose remarks on the musical instruments of the collection and corroboration of the panpipe identification have been appreciated.

I am especially grateful to Dr. George Vaillant, of the American Museum of Natural History, who has been my constant mentor throughout the investigation. In many a conference, he has given unsparingly of his time and brought the full richness of his experience in Middle American archeology to bear upon the problems at hand. Both he and Mr. Clarence Hay have been particularly helpful in pointing out resemblances between Tres Zapotes figurines and figurines from the Valley of Mexico and Morelos. Dr. H. J. Spinden, of the Brooklyn Museum, has also given me the benefit of consultation.

In Mexico, I am greatly indebted to Mr. Ignacio Marquina, of the Dirección de Monumentos Prehispánicos, not the least of whose services was that of expediting technicalities connected with getting excavation under way; to Mr. Eduardo Noguera, for his astute observations on the pottery and the figurines; to Lic. Juan Valenzuela, of the Museo Nacional, for giving me access to material and unpublished reports of excavations in the Tuxtla region, and for confirming comparisons between the pottery of Tres Zapotes and that of Monte Albán; to Mr. Wilfrido Du Solier, for valuable data on the pottery of El Tajín; to Mr. Miguel Covarrubias, for his kindness in showing us his superb private collection of archeological specimens, many of them highly relevant to the present study; and, above all, to Dr. Alfonso Caso, not only for the generous cooperation received from him in his official capacity as Director of the Instituto Nacional de Antropología e Historia, but for his kindness in permitting me to study, under his supervision, both in his private laboratory and at the Museo Nacional, the ceramics of Monte Albán. Without this preparation during the summer of 1937, I should hardly have had the courage to undertake the present investigation. Special thanks are due, also, to Mr. Ricardo Gutiérrez, of Tres Zapotes and Tlacotalpan, for the way in which he looked after our material needs and physical comfort while in camp.

For bibliographic data on the Hueyapam area, I am indebted to Mr. Arthur E. Gropp, of the Tulane University Institute of Middle American Research, and for data out of the general archives of the Mexican nation, I am obliged to Prof. Paul Kirchhoff, of the Department of Anthropology in the Escuela de Ciencias Biológicas, Instituto Politécnico Nacional, Mexico, D. F.

Mr. Charles E. O'Brien, assistant curator of ornithology at the American Museum of Natural History, was kind enough to undertake classification of as many of the bird effigies as it was possible to identify.

For the preparation of the illustrations I am grateful to Mr. E. G. Cassedy, artist of the Bureau of American Ethnology, and for help

in the drawing of text figures 1, 2, 3, 5, 6, 10, 11, 17, 18, 27, 28, and 52 to Mr. Alexis Jetkoff, of New York.

Finally, I want to acknowledge to friends and relatives—above all, to Marian, my wife—my profound gratitude for their forbearance of the asocial life which, month after month, I have been compelled to lead in order to find time for this absorbing task.

C. W. Weiant.

AN INTRODUCTION TO THE CERAMICS OF TRES ZAPOTES, VERACRUZ, MEXICO

By C. W. Weiant

INTRODUCTION

The archeological zone of Tres Zapotes is located on the right bank of the Arroyo Hueyapan in the district of Los Tuxtlas in the southern part of the State of Veracruz. The site comprises about 50 earth mounds of varying size, some of which are on bottom land adjacent to the arroyo while others are on an elevated terrace above this flat ground. The site extends for a distance of about 2 miles and to a small extent overlaps onto the left bank of the stream. (See Stirling, 1940, 1943.)

DESCRIPTION OF THE ARCHEOLOGICAL ZONE

Some notion of the extent of the archeological zone, as well as of the number, shapes, relative base-areas, orientation, and groupings of the mounds, may be gained from map 3.

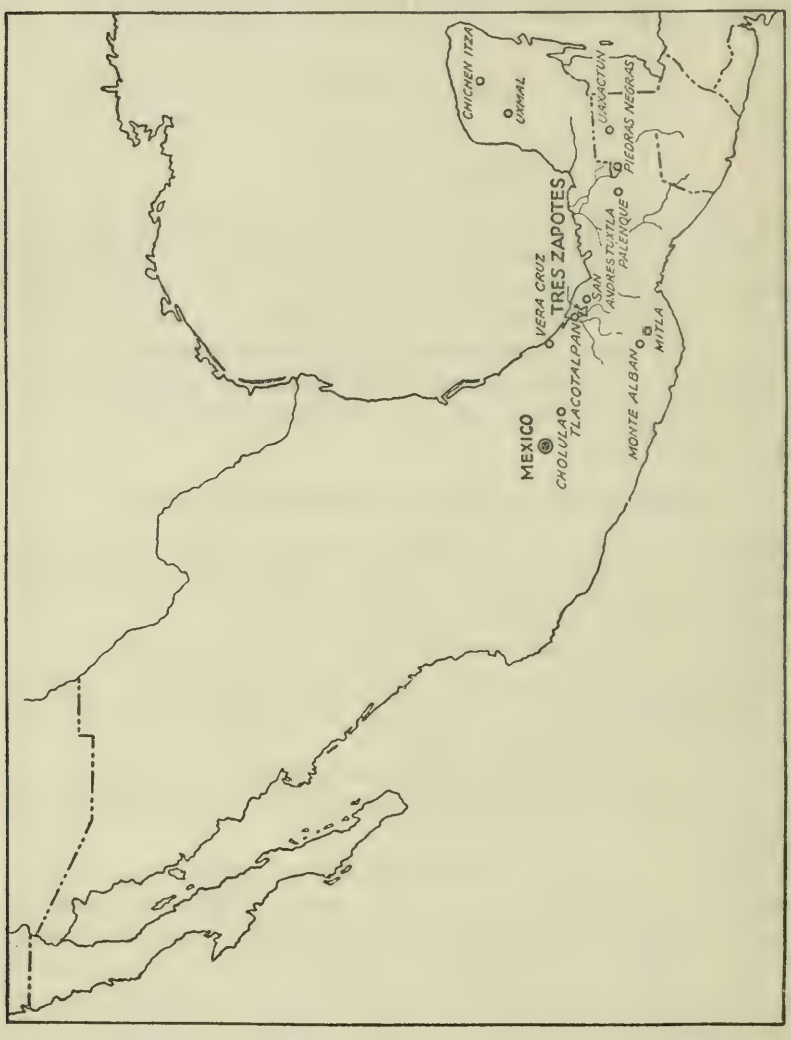
It may be observed that two principal levels are indicated:

1. The level of the Arroyo Flood Plain, which is even with the tops of the steep banks of the arroyo. (The banks themselves range from about 12 to 18 feet in height.)

2. The level of the Main Terrace, which rises with varying degrees of abruptness from the flood plain level to an elevation 20 to 40 feet greater.

At the southeast corner of the Main Terrace, which corresponds to a bend in the arroyo, the ascent from the flood plain is broken by an intermediate level area which is about 15 feet below the terrace. This intermediate level has been designated Lower Terrace on the map. It should be noted, also, that two prolongations from the Main Terrace jut out upon the Lower Terrace. On map 5 these prolongations have been labeled West Promontory and East Promontory, respectively. Both afford a commanding view of the surrounding country, especially to the east and the south. Gullies separate the West Promontory from the Main Terrace proper and the two promontories from each other. These gullies decrease in

depth as one follows them from south to north, and there are indications that they may have been formed, at least in part, by artificial excavation for the purpose of obtaining earth with which to raise the level of the promontories and to build the mounds which they support.



MAP 1.—Geographic position of Tres Zapotes in relation to well-known Nahua, Mixtec-Zapotec, and Maya sites.

For convenience in referring to them the mounds will be considered as belonging to four principal groups, as follows:

THE CABEZA GROUP

This is the group of six mounds clustering about the Cabeza Colosal. They range from 9 or 10 to about 14 feet in height. Mound B

of this group tapers off so gradually on its south side that there is some doubt as to its artificial nature. The face of the Cabeza happens to be directed toward the magnetic north, but does not appear to be oriented in any special way with reference to the mounds.

THE RANCHITO GROUP

This group takes its name from the fact that a small, palm-thatched, sun shelter, jokingly referred to by our workmen as El Ranchito, stood on the top of one of its most conspicuous mounds. It comprises the mounds of the Lower Terrace, those of the two promontories already described, and two mounds, J and K, which occupy a kind of minor promontory of their own, somewhat to the north and slightly to the east of the others. Their height is quite variable. For example, Mounds A and B are about 6 feet high (see map 5), Mound C is about 10 feet, while Mounds D and E are low platforms scarcely more than a foot or a foot and a half above the general level of the promontories. Mound F, also, is of the low platform type, although higher than D and E.

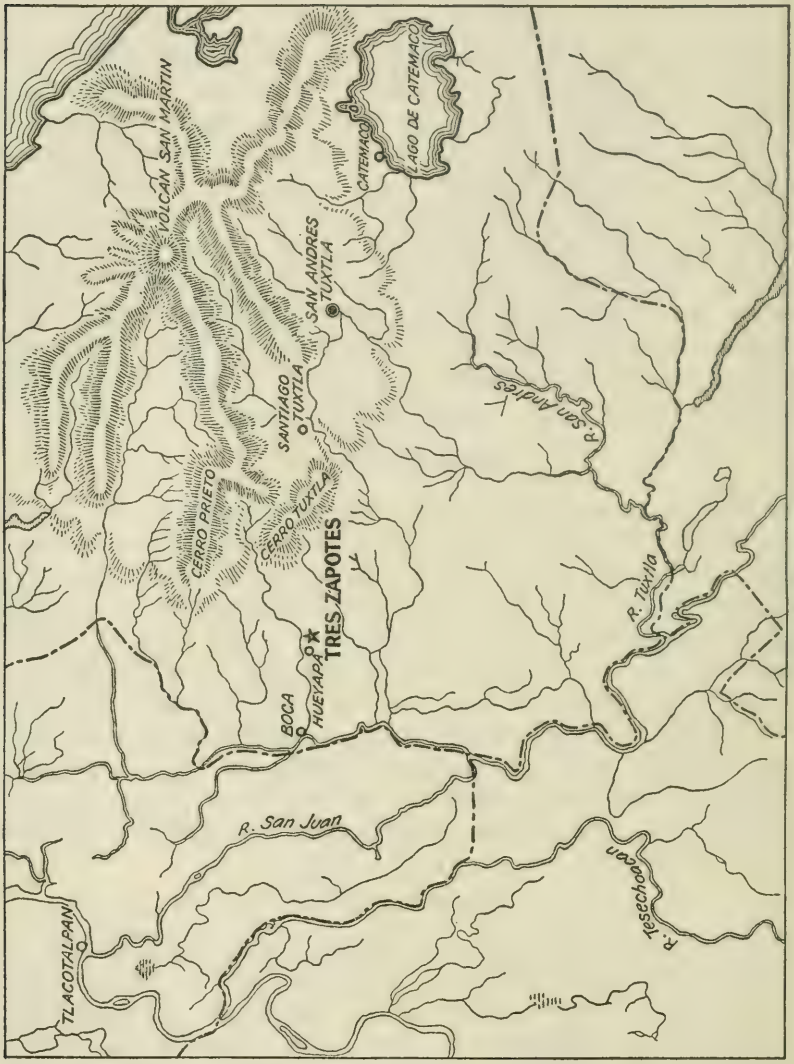
THE ARROYO GROUP

In this group are included all mounds situated on the Arroyo Flood Plain. Dominating this group is Mound A, 25 or 30 feet in height. It has, as indicated, an approximately square base. The twin mounds D and E, of the same shape, are perhaps 18 feet high. Mound C, generally referred to hereafter as the Long Mound, is impressive. It is probably 150 feet long and 18 or 20 feet high. Mounds F, G, and H are each but a few feet high and, since their limits are poorly defined, would hardly suggest artificial construction at all, but Mound G was found to contain the only specimen of architecture encountered, the Stone Platform shown in maps 9 and 10. Mounds I and J are low, too, and Mound B is a barely distinguishable rise of ground.

THE NORTH GROUP

The mounds of this group tend to be relatively large, more or less resembling Mounds D and E of the Arroyo Group. On the top of Mound E, one of the smallest of the group, are two round stone columns about 5 feet long and 16 inches in diameter. Leading up to them from the south base of the mound are two rows of unworked granite boulders. These rows are about 10 feet apart. They suggest great rustic balustrades culminating in stone columns at the top. The columns have fallen and are partly buried. Two similar columns lie on Mound D. (There is, also, such a column lying a

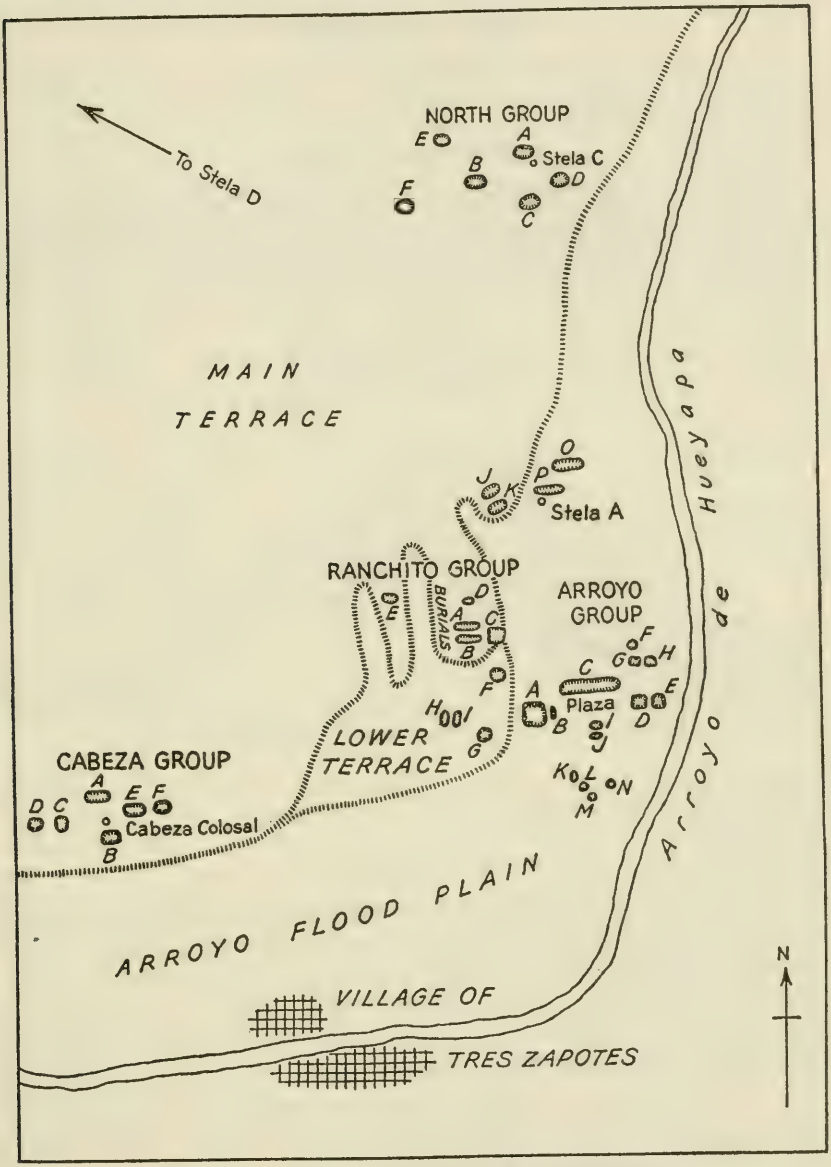
little to the northwest of Mound D on the Ranchito site.) It may be mentioned that, while Mound E is not especially large, it is situated on high ground and affords a commanding view of the whole zone.



MAP 2.—The Tuxtla region.

As already stated, the groupings just given have been made primarily to facilitate discussion. They do not necessarily imply contemporaneity or functional integration, although one might well surmise that, in the Ranchito Group, Mounds A, B, C, and D had group uses, as did also, in all probability, the mounds immediately surrounding the Plaza of the Arroyo Group.

It should be noted, too, that map 3 can hardly be considered complete. To the west of the North Group and just beyond the limits of the map is a fifth important mound group which received



MAP 3.—Principal mound groups at Tres Zapotes.

only cursory inspection for the possible presence of stone monuments. Even within the confines indicated by the map, particularly in wooded areas, there are undoubtedly some mounds which escaped observation,

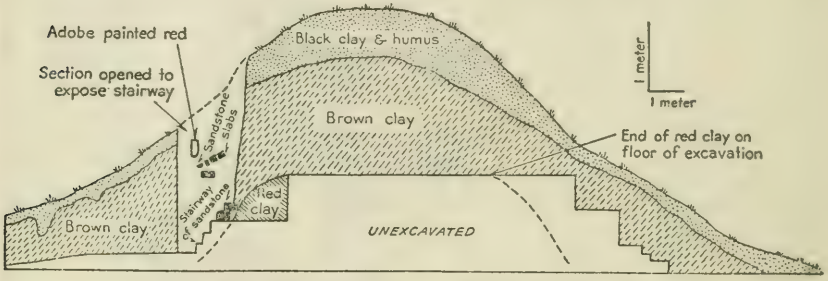
and within the Arroyo Group, a bit to the south of the mounds shown, are others, of minor size, which, for lack of time, could not be investigated, even superficially, and are, for that reason, omitted from the map.

THE EXCAVATIONS

Excavations from which pottery and figurines were taken may be summarized as follows:

THE CABEZA COLOSAL

During the excavation of the Cabeza Colosal, sherds began to appear at a depth of about half a meter; sandy Coarse Red ware and Polished Black ware predominating. All the material, however, showed signs of extreme attrition, and when it was realized that this soil had been considerably disturbed on a number of previous occasions, it was decided to ignore this material in the present study. Two heads and one torso of characteristic Tres Zapotes figurines were found in the



MAP 4.—West-east section through Mound E, Cabeza Group.

course of the excavation. A broad trench run from the Cabeza northward nearly to Mound A proved completely sterile.

CABEZA GROUP, MOUND E

The structure of this mound is revealed in the longitudinal section shown by map 4. Five steps, slightly curved from side to side, formed a stairway almost 8 m. in width, leading up the west slope of what must have been the primary mound. The top of the primary mound is indicated by a floor of red clay, which is extended as a ramp as far as the top step of the stairway. The sandstone slabs shown in the excavation over the stairway apparently were part of the facing of a secondary mound, to which was added still another layer, bringing the mound nearly to its present height.

In this excavation sherds began to appear at a depth of 25 cm., the same Coarse Red ware and Polished Black ware which had been found around the Cabeza predominating, but they were not at all numerous. Mixed with the sherds were traces of charcoal and fragments of deer

bone. A few figurines and figurine fragments of the solid Red Tres Zapotes variety were obtained. At a depth of slightly more than a meter, sterile soil was encountered, and this continued almost to the red floor, just above which was found a single sherd of Black Incised ware.

STELA A

Excavation around this stela produced four Tres Zapotes figurines, an effigy of the king vulture, and an extensive cache of obsidian flakes which included many complete knives. All artifacts were close to the surface. Below them lay about 1 meter of sterile soil, which, in turn, rested upon a clay floor, the floor that originally supported the stela. The sterile deposit had evidently accumulated after the fall of the stela.[1]

RANCHITO GROUP

ZONE OF THE BURIALS

This zone is located on the western side of the East Promontory within the area indicated on map 5. The burials fall into two groups, superficial and deep.

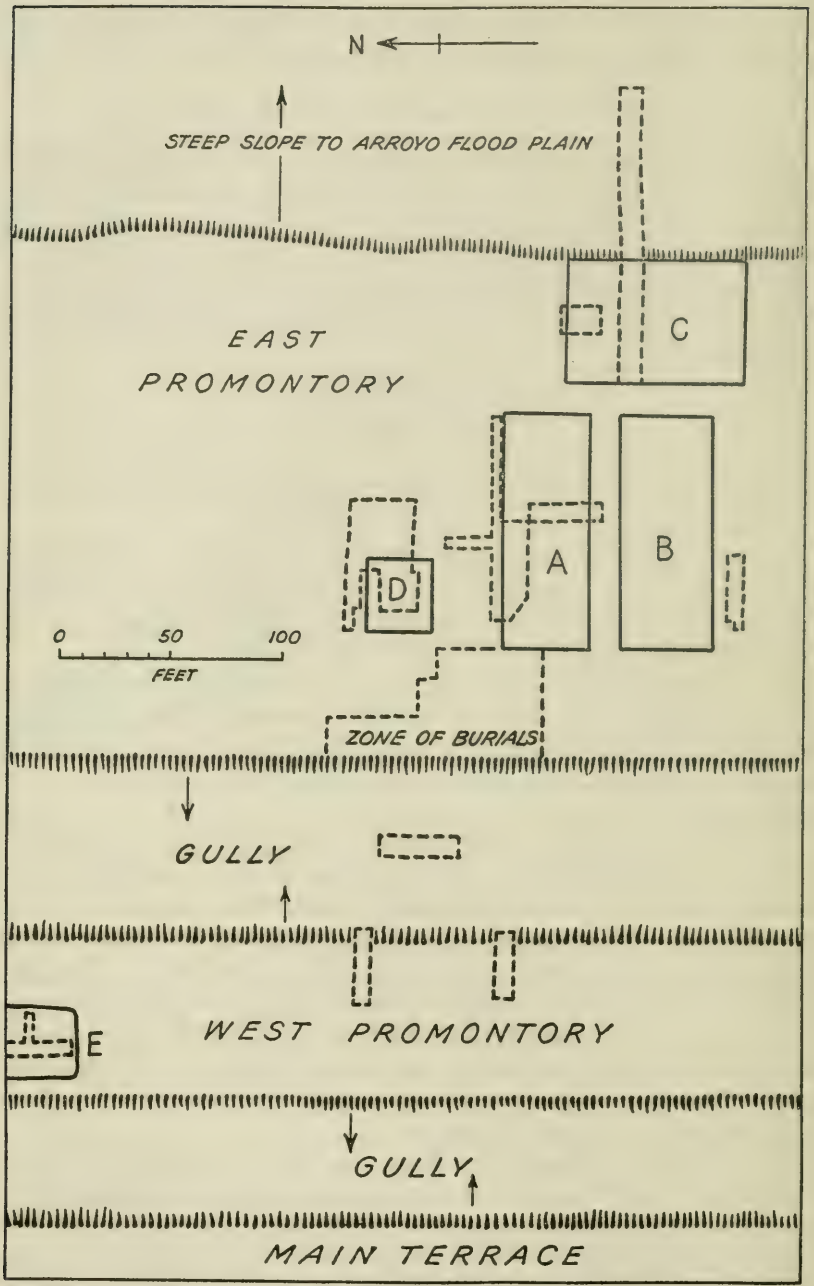
The superficial, or surface, burials occur at a depth of only 30 cm. They consist of a pot, usually of olla form, containing cremated bones and covered with an inverted dish. Smaller vessels are frequently found along with the bones inside the olla.

The deep burials are found at a level of 1.3 to 1.7 m. These consist of very large ollas, as a rule inverted, containing occasional fragments of bone, or perhaps only a few teeth, without signs of cremation. Smaller vessels and large sherds occur either in or close to the burial vessels.

As the excavation proceeded from the edge of the promontory inward toward Mounds A and D, surface burials soon disappeared and deep burials became increasingly rare. Tres Zapotes figurines, broken manos and metates, and obsidian flakes occurred throughout. Hollow figurines tended to concentrate in the upper levels. Just west of Mound A the trench reached a depth of 3 m., before striking the sterile layer of clay which lies under the rich, black, sherd-bearing soil above. Here, at a depth of about 2.6 m., were found two dark-brown, Mayoid, sculptured sherds, a clay head representing Xipe, and a number of dog and deer bones.

An interesting discovery in this excavation was that of a series of telescoped sections of clay tubing, very similar to those which emerge from Zapotecan tombs supposedly for the escape of the soul (Saville, 1899, p. 350 et seq.). They were found at a depth of about 2 m. slightly to the northwest of Mound A, toward which they seemed to be leading. To our disappointment, however, they terminated

[1] For photographs and description of Stela A, see Stirling, 1939, p. 200.

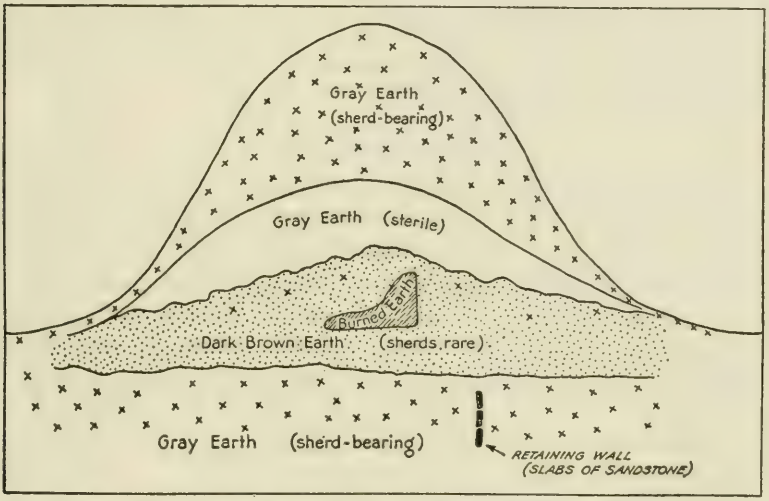


MAP 5.—Principal mounds of the Ranchito Group. (Dotted lines enclose excavated areas.)

abruptly before reaching the mound, their disappearance coinciding with that of the burials. One is tempted to speculate on the possibility that they may have provided a common exit for the souls of all those whose fate it was to be buried in this cemetery.

MOUND A

Details of this excavation are given in map 6. The retaining wall, shown in cross section, proved to be about 2 m. long. No difference was noted in the material from the two sherd-bearing layers. Among the specimens of special interest which came from this mound are the "danzante" seal (fig. 50, *c*), a spindle whorl on which is carved a human



MAP 6.—North-south section through Mound A, Ranchito Group.

figure wearing a large headdress, and the black effigy vessel shown in plate 58, figure 3, which was found at a depth of 2.6 m. and contained a piece of an infant's skull. From this mound, also, came a small square of mica.

MOUND C

As indicated in map 5, two broad trenches were cut into this mound, one from the north which was carried nearly to the center, and one running east and west through the highest part of the mound which was prolonged down the steep face of the terrace to the flood plain level. Probably 90 percent of the trichrome and polychrome sherds came from this mound. The pottery, in general, corresponded closely to that of the surface burials. A spectacular find here was that of the large laughing figurine shown in plate 44, figure 11, which occurred toward the west end of the long trench at a depth of about a meter. Almost in the exact center of the mound was a secondary burial of a large adult. Behind the skull was a small "pie plate" similar to that shown in

figure 17, *e*, and with the bones was a jadeite pendant in the form of a dog's head. Close by, at a depth of 3 m., was found the direct burial of a large male adult, lying on the left side, with the head to the west, and facing north. By the feet was a flat-bottomed black dish and over the middle, a globular olla of Red ware with a broadly incised simple decoration around the body below the short neck. The olla had, for a cover, an inverted bowl of the tripod loop-legged variety (fig. 25, *f*). Just above this were two stones about 65 or 70 cm. long. One consisted of a mass of marine fossils; the other was a hexagonal segment of columnar basalt. Both of these were set up vertically. Next to the two stones were three hands from large Red ware figurines. Typical Tres Zapotes figurines occurred sporadically throughout the mound, as they did in all other excavations from which any considerable material was taken. The prolongation of the trench down the face of the terrace proved relatively sterile.

MOUND D AND ADJACENT AREAS

It will be recalled that Mound D is but a low platform. Details of the excavation, including depth and relative density of sherds, are given in map 7. This was perhaps the most productive of all the excavations undertaken. Except for burials, which here were decidedly rare, conditions were quite similar to those described in connection with the zone of the burials. That is, once the digging had proceeded beyond the layer of top soil, one encountered a rich sherd-bearing deposit of black earth extending to an average depth of 3 meters, below which appeared yellow clay that soon became sterile.

From Mound D itself came a vertical incensario, part of a vessel with annular base, a brown pottery cylinder with flat rectangular ends, a pottery tube which may be the neck of a Teotihuacán "flower vase," and tripod whistles in the form of the coati-mundi carrying its young.

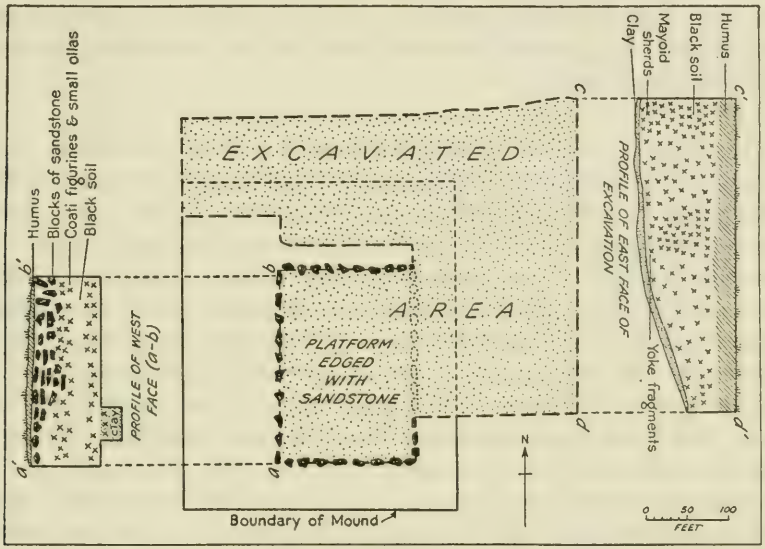
About 3.3 m. north of the mound, at a depth of a meter, was discovered a mosaic of potsherds. Placing sherds of dissimilar clay and slip in contiguous positions to secure a variegated effect, and choosing shapes which would fit tightly together, the maker of this mosaic had produced a disk 1.3 m. in diameter. On its circumference, to the north, lay three broken pots, while just above the mosaic was surface burial R–9, which consisted of eight pots. East of this point no other surface burials, and very few deep burials, were encountered.

In the lowest part of the trench north of the mound were found the figurine of the tiger god (pl. 41, fig. 2), the deity with the rabbit's head replacing the right hand (pl. 41, fig. 8), and several broken seals, one of them cylindrical.

Directly in front of the mound to the east, at a depth of 2 meters, was discovered a piece of a well-carved stone yoke. Close to it, at the same level, were found a carved sherd of Dark Brown ware, showing

a human head and plumes (pl. 57, fig. 16) and a sherd of carved Yellow ware depicting a snake in vertical position, which recalled the Dresden Codex (pl. 57, fig. 9). It is interesting to note the close association of so-called Totonac yoke fragments with Mayoid sherds and figurines, and their absence from levels in which are found the Totonac laughing faces. The latter always occur superficially.

The excavation at the bottom of the gully between the two promontories (map 5) was merely a sampling operation for material washed down from the top of the slope; the promising finds obtained soon led to the excavation of the zone of the burials.



MAP 7.—Details of excavation, Mound D, Ranchito Group.

MISCELLANEOUS EXCAVATIONS

The two excavations on the west promontory, opposite the zone of the burials, and the one just south of Mound B, produced only surface refuse and were soon abandoned.

From Mound E the material obtained was not abundant, although a few fine specimens were collected. These did not differ essentially, however, from the material collected on the east promontory, with which they have been studied.

MOUNDS J AND K

These mounds are outside the Ranchito Group proper (see map 3), but were, for convenience, classified as part of that group. The mounds themselves were not extensively penetrated. First, a trench about 2.8 m. deep and 16 m. long was run parallel to the two mounds and midway between them. The upper 60 cm. consisted of heavy black

soil containing numerous potsherds of Coarse Red ware. Below this was a layer of brown clay and earth about a meter thick which also contained sherds. At the bottom of the black layer was a stratum of potsherds containing many specimens of fine Black Incised ware with red pigment in the incisions. This ware continued sporadically through the brown layer. In the brown layer, also, were solid, red figurines of Tres Zapotes type (one of them with the face painted black), numerous "teapot" spouts, principally of pinkish clay with a white slip, and a number of incised sherds of the same ware. Below the brown layer, the soil was sterile; first a layer of coarse sandy soil, then 30 cm. of heavy white clay, and finally a hard-packed sandy deposit. Two additional trenches, at right angles to the first, were carried part way into each mound, revealing the same stratification as that just described.

MOUND F

This mound was completely excavated. Near the center of the mound, at a depth of only half a meter, were found four large, hollow, mold-made figurines (pl. 44, figs. 5 and 8, and pl. 42, figs. 3 and 7), two of them typically "Totonac" and two that are more Maya than Totonac in style. Other specimens from about the same level include a tubular whistle, a whistle in the form of a bird (with clay pellet to make it warble), and a single sherd of Black Sculptured ware. It was discovered that this mound contained deep olla burials similar to the deep burials of the main burial zone. From these burials five complete pots and three restorable vessels were obtained. From the deeper levels came four fragments of plain stone yokes and one very beautifully worked, closed yoke bearing Caso's Zapotecan "C" glyph, a highly convincing bit of evidence of cultural connection between this region and the centers of Zapotecan culture to the west. Also from deep levels came a stone skull, a spindlewhorl on which was carved a human figure, a Tlaloc head of crude Brown ware, and several sherds of Dark Brown Sculptured pottery, one of them paneled. Under an area of burned earth was a deep burial, the skeleton lying extended on the side, head to the north and facing east. In spite of being slightly flexed, it measured 61 inches from the top of the head to the ankle. Another and quite unusual feature encountered in this excavation was a large, circular, stone fireplace more than a meter and a half in diameter and two-thirds of a meter in height, located almost in the exact center of the mound. It was filled with burned earth, sherds, figurines, and mano and metate fragments.

ARROYO GROUP

THE PLAZA

South of the east end of the Long Mound (C) and approximately opposite the center of Mound A a test pit was dug. At a depth of

about 30 cm. sherds were found resembling those of the cremated burials on the Ranchito site. Below this deposit, which was rather thin, the excavation proceeded through sterile loam to a depth of 2 m. where striated ("paddle-marked") olla sherds were found. These were of coarse red clay with white slip. A second test pit a short distance to the southwest of the first confirmed this stratification. Only 25 cm. below the deep sherd deposit water was encountered, and the pits were abandoned.

THE LONG MOUND (C)

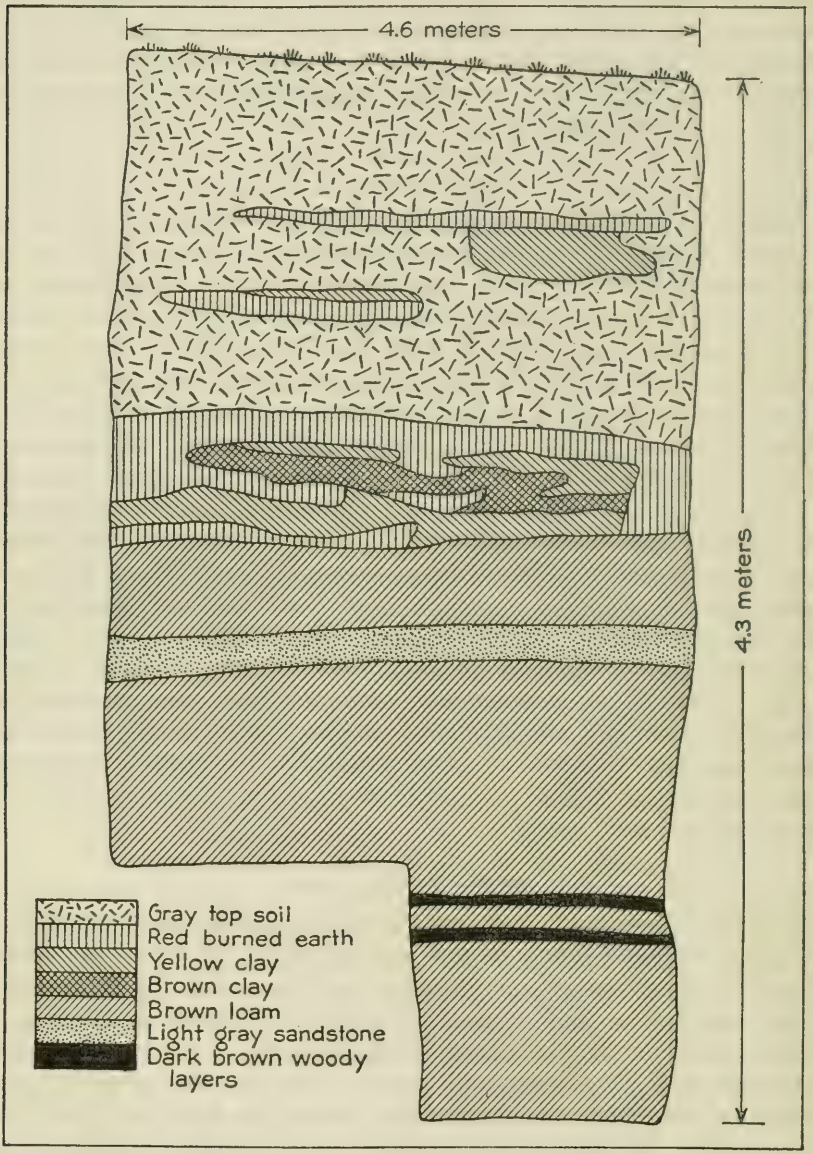
A stepped trench was cut into the south side of the mound midway between the ends from base to top. Map 8 shows the stratification encountered at the deepest section of the excavation. The bottom of this section is approximately level with the Plaza; the top is a little more than half way up the side of the mound. The woody layers probably represent old corduroy floors laid across the top of early mound constructions to prevent excessive weathering. Below these floors were found animal, bird, and fish bones, a solid red figurine of Vaillant's A type, a typical Tres Zapotes figurine (which, however, was of gray clay, rather than red, although painted a dark red), sherds of a highly polished Red ware, and sherds of several other wares found nowhere in the Ranchito excavations. Sherds from the upper levels did resemble those from the Ranchito excavations, although the highly polished Red ware persisted sporadically here, too. Nowhere in this mound were any mold-made figurines found. About 2.3 m. directly below the center of the top of the mound a human jaw was discovered. At the northeast corner of the mound were some large boulders. Shallow excavations about these produced several mano and metate fragments and sherds like those found in the upper levels of the mound itself.

MOUND G (THE STONE PLATFORM)

In this mound was found the only specimen of architecture encountered by the expedition. Maps 9 and 10 provide details of this structure. Curiously enough, it exhibits what Joyce (1926), at Lubaantun, called the "in-and-out" style of building, later shown by Thompson (1931, app. 1) to be not a style of architecture at all, but the result of weathering. A north-south trench through the structure produced sherds like those of the deeper level at the Ranchito site and a fair number of Tres Zapotes figurines, but no mold-made figurines. Well below the level of the Plaza, this excavation produced wares like those of the deep level in the Long Mound. Under the south wall was found a polished head of black stone.

MOUND F

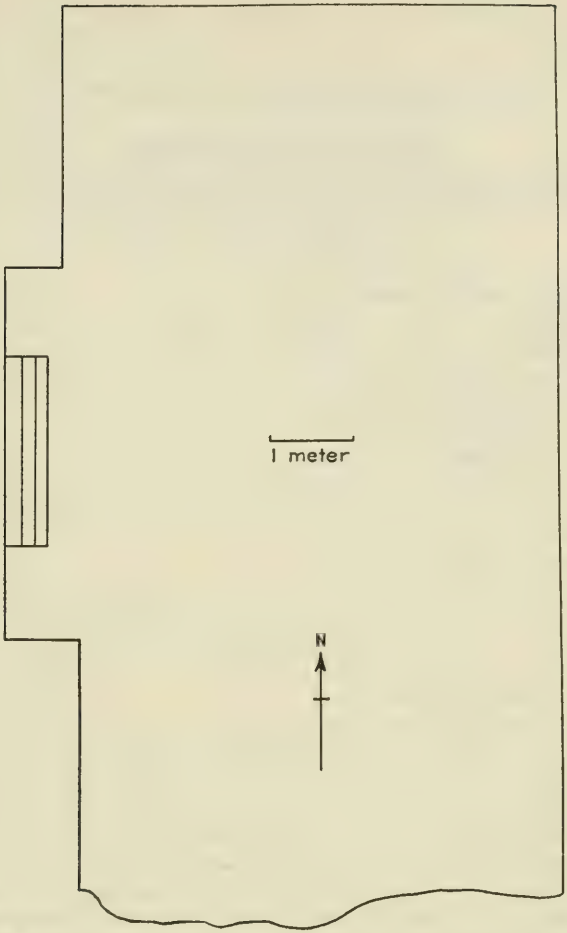
A trench through this mound yielded sherds like those of the Ranchito deep level.



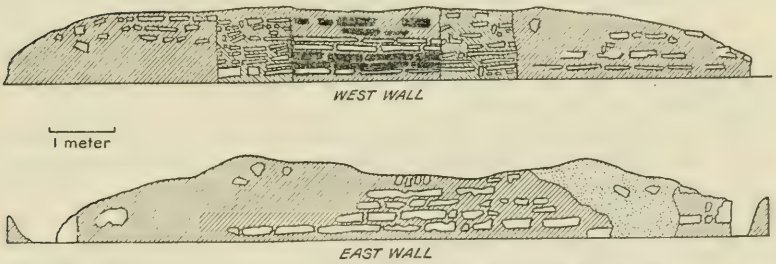
MAP 8.—Stratification in Long Mound (C), Arroyo Group.

MOUND B

On the top of this mound was a seated stone figure with the top part missing. Extensive excavation here produced only a few sherds of Coarse Black ware and one sherd with numerous perforations.



MAP 9.—Plan of Stone Platform, Arroyo Group, Mound G.



MAP 10.—Mound G, Arroyo Group, east and west walls.

MOUNDS I AND J

Trenches through these mounds yielded only a few sherds like those of the Plaza surface.

PART 1.—THE POTTERY*

MIDDLE TRES ZAPOTES A†

(Sherds from beneath the Stone Platform, from bottom level of Plaza, and from deep levels of Long Mound)

CLASSIFICATION

I. Unslipped or partially slipped wares.
   1. Striated.
   2. Smothered.
   3. Porous White.
   4. Gray.
      a. Unpolished.
      b. Polished.

II. Monochrome wares.
   1. Normal White.
   2. Black.
      a. Corrugated or fluted.
      b. Incised.
   3. Brown.
   4. Red.
      a. Unpolished or slightly polished.
      b. Highly polished.

III. Dichrome (Red-and-White Incised) ware.

I. UNSLIPPED OR PARTIALLY SLIPPED WARES

1. Striated ware.

Slip: White (limited to neck and shoulder of olla).

Surface: Rough and striated; the striations appear to have been made with a brush. The ridges have an average width of 1 mm., are 2 to 3 mm. apart, and stand out about 0.5 mm. above the general surface level. They spread diagonally from the root of the neck. Neck sherds are not striated, but on account of the coarseness of the temper have an uneven surface. The inner surface may be black or red, depending upon conditions of firing, and is more or less pitted.

Paste: Rust red, gray, or black in color; porous; heavily tempered with grit; not very friable.

Form: Nearly vertical neck sherds with flat rim, about 7 cm. in height and 22 cm. in diameter; convexo-concave body sherds ranging in thickness from 7 to 10 mm. (fig. 1, *a*, *b*).

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*For figures 1–29 referred to in classification of pottery, see pp. 32–54.

†The pottery has been grouped under three main headings: Middle Tres Zapotes A, Middle Tres Zapotes B, and Upper Tres Zapotes. Upper and Middle B materials obviously belong to separate stratigraphic categories since they are associated with distinct types of burials occurring at different levels in the same excavation. The distinction between Middle B and Middle A, however, rests primarily upon cross-cultural time markers (especially the associated figurines), rather than upon direct stratification, although Middle A was found at greater depth below the surface than was any of Middle B material.

2. Smothered ware (fired in such a manner as to blacken the surface except for an irregular zone about the rim).

Slip: White, applied to form a band along the rim externally; if present on inner surface covers the whole inside of the vessel, but is generally absent.

Surface: Smooth, with only slight polishing.

Pastes: Homogeneous gray paste somewhat coarser in texture than the Smothered ware of Middle Tres Zapotes B and Upper Tres Zapotes.

Forms: Figure 1, *c–f;* with few exceptions, sherds are too small to permit reconstruction of vessel shapes.

3. Porous White ware.

Slip: Ordinarily none; one specimen is dull black on the outside, but this seems to be an effect of the firing.

Surface: Comparable in feel to the slate of a blackboard.

Paste: Light gray to white in color, merging into that of the surface; homogeneous and compact; extremely light in weight. (The term "porous" is suggested not by the texture of the paste, but by the finely pitted character of the surface.)

Forms: Indeterminate, as no rim sherds were found; figure 7 shows a vessel of this ware from Middle Tres Zapotes.

4. Gray wares.

a. Unpolished.

Surface: Fine and sandy in appearance, with glistening particles of silica, although actually worn quite smooth.

Paste: Compact, sandy, and extremely hard.

Form: Figure 1, *l.*

b. Polished.

Surface: Very smooth, highly polished, resembling the Polished Gray ware of Monte Albán I.

Paste: Finely granular, moderately porous, and gray in color.

Forms: Figure 1, *m, n, o.*

Decoration: In some cases, grooves parallel with the rim.

II. MONOCHROME WARES

1. Normal White ware.

Slip: White to pale cream; may be applied directly to surface, or may overlay a wash of the same clay as the paste. Deterioration of the slip in the latter case gives rise to a delicate rose tint in some specimens.

Surface: Smooth.

Paste: Homogeneous gray or buff-colored; many, but not all, specimens coarser than the White wares of Middle Tres Zapotes B, and Upper Tres Zapotes; occasionally exhibits highly porous modification and takes on brick red or black color according to firing. The same specimen may present both the normal and the modified form of the paste.

Forms: Figure 1, *g–k.*

Decoration: One specimen (fig. 1, *h*) has broad shallow incisions through the slip.

2. Black wares.

a. Corrugated or fluted.

Slip: A true black slip, commonly absent from inner surface of neck sherds.

2. Black wares—Continued.
   a. Corrugated or fluted—Continued.
      Surface: Smooth and highly polished outside; slightly rough and pitted inside, and made more or less uneven by projecting particles of temper.
      Paste: Extremely variable, even in the same specimen; characteristically a highly porous ash-gray material resembling pumice (probably a volcanic ash) containing an abundance of coarse grit temper. It may, however, have a finer texture and be rust red or black in color; more rarely, it is compact and light brown in color.
      Forms: Figure 1, *p–v*.
   b. Incised.
      Slip: A heavy black slip contrasting sharply with color of paste.
      Surface: Smooth and well polished, but inferior in this respect to the corrugated ware.
      Paste: Subject to the same variations as the corrugated, except that the distinctly pumicelike modification does not occur.
      Forms: Shallow dishes with vertical, flaring, or outcurved sides (figs. 2, 4). The specimen shown in figure 2, *b*, is of exceptional depth.
      Decoration: (1) Wide, shallow, roughly parallel lines made by a blunt implement before firing (fig. 2). (2) Crude rectilinear and curvilinear designs scratched through the slip after firing. Narrow incisions predominate, and these are frequently filled with a red pigment. The technique strongly suggests Monte Albán II. (Fig. 4.)
3. Brown wares.
   Slip: A number of shades are represented, notably 13–A–7, 13–B–10, 13–H–8, 14–A–7, and 14–A–10, in the Maerz and Paul scheme of color classification. All have the general appearance of varnished wood.
   Surface: Smooth, well polished.
   Paste: Like that of the Black Incised ware.
   Forms: Figure 3.
4. Red wares.
   a. Unpolished or slightly polished.
      Slip: Specimens from the Long Mound have a color for which the nearest equivalent is Maerz and Paul's 6–I–11 (Sierra Venetian); those from below the Stone Platform correspond more closely to 5–E–11 (Fujiyama). Either might be loosely described as brownish red or rust.
      Surface: Slightly rough to smooth; the rougher specimens are finely pitted.
      Paste: Gray and fairly compact, with a small amount of grit temper.
      Forms: Figure 5, *a–i*.
      Decoration: Generally none, although one or two incised lines at the base of a neck may appear. (Fig. 5, *b*.)
   b. Highly polished.
      Slip: Maerz and Paul's 6–J–12 (Henna), richly applied to both surfaces.
      Surface: Brilliantly polished.
      Paste: Same as that of the Unpolished Red specimens.
      Form: Figure 5, *j*.

III. DICHROME (RED-AND-WHITE INCISED) WARE

Red-and-White Incised ware.

Slip: Outer surface white; inner surface a deep red, Maerz and Paul's 6–K–10 (Chalet Red).

Surface: Outside, smooth with dull finish; inside, highly polished.

Paste: Coarse in texture, porous, buff-colored, and nearly homogeneous.

Form: Flat-bottomed dish with extraordinarily thick, outcurved sides (fig. 6).

Decoration: Broad, shallow, crudely sketched incisions through the white slip.

MIDDLE TRES ZAPOTES B

(Deep burial vessels from the Ranchito site)

CLASSIFICATION

I. Unslipped or partially slipped wares.
   1. Speckled.
   2. Smothered.
   3. Porous White.

II. Monochrome wares.
   1. Normal White.
   2. Black.
      a. Modified Black.
      b. Incised before firing.
      c. Incised after firing.
   3. Rust Red.
   4. Dead-leaf Brown.

III. Wares and painted decoration.[2]
   1. Pseudodichrome (dichrome effect achieved by a design in one color upon an unslipped background).
   2. Pseudotrichrome (trichrome effect achieved by a design in two colors upon an unslipped background).

I. UNSLIPPED OR PARTIALLY SLIPPED WARES

1. Speckled ware.

Slip: A reddish brown (Maerz and Paul's Indian Red, 6–L–12), found only on outer surface of necks of ollas and on upper part of body; more often than not entirely absent.

Surface: Inside rough, peppered with projecting particles of mica, but not easily eroded; outside, practically the same except in specimens exhibiting slip, in which case the slipped area is fairly smooth, although the temper can still be detected. Some specimens present a slightly glazed effect, which, however, does not obliterate the unevenness due to temper.

Paste: Coarse, gray, and abundantly tempered with mica.

Form: Very large ollas with corrugated necks; the diameters of orifices range from 20 to 30 cms. (fig. 7). Next to the globular forms of the Rust Red ware, the commonest primary vessel of the deep burials.

Decoration: Striations on the body of one vessel (fig. 7, *d*).

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[2] These wares, while quite common in Upper Tres Zapotes, are each represented by but one vessel in the deep burial material.

2. Smothered ware.

Slip: None.

Surface: Smooth, but not glossy; the unsmothered portion next to the rim is narrower and more regular on the inner surface than on the outer.

Paste: A compact gray or black paste, especially heavy in weight.

Forms: See figure 8.

3. Porous White ware.

The same ware that has been described under this designation in connection with Middle Tres Zapotes A. Figure 9 shows the only complete vessel of this ware found. The interior is dark gray in color.

II. MONOCHROME WARES

1. Normal White ware.

Slip: White, generally of good quality; in some cases appears to have been preceded by a thin, salmon-colored, clay wash.

Surface: Very smooth.

Paste: Variable; may be highly porous and of brick-red or gray color, or may be compact and relatively nonabsorbent, in which case broken surfaces tend to become quite smooth, have a distinctly soapy feel, and are difficult to mend.

Forms: Large cylindrical vessels.

a. With slightly recurved walls (fig. 10, *a*).

b. With straight wall, rim flange, and flaring rim (fig. 10, *b*).

Ollas with vertical necks and overhanging rim. The specimen in figure 10, *c*, had lost any slip it once possessed, but since the great majority of sherds from vessels of this shape have a white slip, there can be little doubt that it belongs to this category.[3]

2. Black wares.

a. Modified Black.

Slip: A shiny black slip which has acquired, over large areas, a brownish or reddish discoloration due to weathering.

Surface: Smooth, polished.

Paste: A porous brick-red paste with gray or black central core. It is the outer red zone of the paste that accounts for the altered appearance of the slip after long exposure and wear.

Forms: Vessels of nearly cylindrical form and of great size (35 to 40 cm. in diameter and as much as 60 cm. high). The sides are slightly recurved (fig. 11, *a*, *b*, *c*). Vessel with spout-handle (fig. 11, *d*). Flat-bottomed dishes. These may have outcurved sides (fig. 11, *e*) or flaring sides. Of the latter type, only an incomplete specimen was found; the bottom of this has a diameter of 23 cm.

Decoration: The large vessels (fig. 11, *a*, *b*, *c*) have a flange about 5 cm. below the rim, decorated with deeply cut, diamond-shaped or ovoid incisions which give the effect of a twisted rope. Above the flange the wall of the vessel is fluted.

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[3] The forms described here are restricted to those found in direct association with burials. By no means do they comprise the full range of forms found in the general Ranchito deposit.

2. Black wares—Continued.

b. Incised before firing.

Slip: Dull black.

Surface: Smooth, only slightly polished.

Paste: Similar to that of the modified black.

Forms: Among the deep burial vessels only two specimens represent this ware—the miniature composite silhouette bowl shown in figure 12, *a*, and the dish with vertical wall, a large sherd of which appears in figure 12, *b*.

Decoration: In figure 12, *a*, wide, but extremely shallow grooves made with a blunt implement; in figure 12, *b*, sharply cut incisions about 2 mm. in width and of equal depth.

c. Incised after firing.

Slip: Black, in some cases glossy, in other cases dull.

Surface: Smooth, occasionally very well polished.

Paste: A very compact gray paste with fine grit temper.

Forms: Simple silhouette bowl (fig. 13, *a*). Flat-bottomed dish with vertical sides (fig. 13, *c*). Flat-bottomed dish with vertical sides, rim flange, and wide incurved lip (fig. 13, *b*).

Decoration: Thinly incised lines which cut through the slip and form stepped, cross-hatched, and serpentine patterns. In some instances the incisions are filled with red pigment (Maerz and Paul's Claret Cup, 6–B–5 or 6–B–4).

3. Rust Red.

Slip: Exceedingly thin and of the same color as the paste, Maerz and Paul's 5–F–11 or 5–F–12 (Burnt Sienna).

Surface: Outside smooth with slight roughening toward bottom of vessel; inside rather uneven and pitted and not so well polished, although not rough to the touch except at the bottom. (Large specimens sometimes striated.)

Paste: Extremely porous red paste containing fine particles of black mica temper.

Forms: Olla-bowls, 7 to 11.5 cm. in height, with orifices 9 to 16 cm. in diameter (fig. 14).

Ollas: very large globular vessels with short vertical necks and orifices about 36 cm. in diameter. These constitute the most common form of primary vessel in a burial.

4. Dead-leaf Brown.

Slip: Maerz and Paul's 5–A–12 (Feuille Morte); applied only on interior of vessel.

Surface: Interior smooth, well polished; exterior worn to a chalky smoothness near rim, but slightly rough farther down.

Paste: Compact and homogeneous in texture; gray at center, but of dull reddish color near surface.

Form: Incurved bowl (fig. 15).

III. WARES WITH PAINTED DECORATION

1. Pseudodichrome.

Slip: Dark red (Maerz and Paul's Mineral Red, 6–J–3), on decorated part of vessel only; elsewhere, vessel is without slip and has a color ranging from cream to buff.

Surface: Smooth both outside and in, although inner surface is more or less uneven.

Paste: Like that of the Dead-leaf Brown ware.

1. Pseudodichrome—Continued.

Form: Figure 16. This specimen is unique in our collection.

Decoration: Neck, shoulder, and interlobular grooves of body painted red; lobes themselves left unslipped, so that a dichrome effect is created.

2. Pseudotrichrome.

Slip: None; color of clay: orange to buff.

Surface: Moderately smooth and polished, creating the feel of chalk of the "dustless" variety.

Paste: Porous, orange or buff-colored, with a smattering of relatively coarse, whitish or gray, grit temper; very friable.

Form: The only deep burial specimen of this ware is a large plate with outcurved sides, having a diameter (at rim) of 42 cm. and a thickness of 5 mm.

Decoration: Painted decoration on inner surface as follows: Along rim, a black band about 1 cm. wide; near bottom, a series of four concentric circles about 0.5 cm. wide, black and red alternating. The second circle, a red one, has a wavy outline; the others are regular. The red and the black on the unslipped background create a trichrome effect. In no other deep burial specimen have two colors been employed in decoration.

UPPER TRES ZAPOTES

(Surface burial vessels)

CLASSIFICATION

I. Unslipped or partially slipped.
   1. Gray.
   2. Yellow and Pink.
   3. Rust Red, rough.
   4. Smothered.
   5. Porous White.
   6. Speckled.

II. Monochrome.
   1. White (or Cream).
   2. Black.
   3. Rust Red, smooth.
   4. Reddish Brown.
   5. Orange.
      a. Normal.
      b. Aberrant.
   6. Dark Brown.
   7. Dubonnet Red.

III. Pseudodichrome (design in one color on an unslipped background).
   1. Orange.
   2. Brown.
   3. Black.
   4. Dubonnnet Red.

IV. Dichrome.
   1. Dubonnet Red-and-Orange.
   2. Dubonnet Red-and-Dark Brown.
   3. Dubonnet Red-on-White.
   4. Brown-on-White.
   5. Black-on-Rust Red.
   6. Black-on-Dubonnet Red.

V. Pseudotrichrome (design in two colors on unslipped background).
   1. Red-and-Black.
   2. Red-and-Orange.
   3. Brown-and-Black.

VI. Trichrome.
   1. Red-and-Black on White or Cream.
   2. Dubonnet Red-and-Orange on White.

I. UNSLIPPED OR PARTIALLY SLIPPED WARES

While some of the wares listed under this head, especially the Yellow and Pink, must at one time have had a slip or painted decoration (since thousands of sherds and many whole vessels exhibit traces of slip or painted design), yet the number of specimens from which all such traces have been obliterated is very great. For this reason, it seems desirable to describe them exactly as found.

1. Gray ware.

Color: Dull gray, ranging from light to dark (Maerz and Paul's 5–A–1 to 6–A–1). Thin vessels tend to be light.

Surface: Smooth, but not shiny.

Paste: Compact, homogeneous, and of same color as surface.

Forms: Simple silhouette bowls.

a. Round-bottomed with curved sides; diameter 14–23 cm., height about one-third diameter, thickness 2–4 mm.
   (1) Without modification of form.
   (2) With spout.
   (3) With cascabel supports.

b. Flat-bottomed, averaging 15 cm. in diameter, 4.5–6 cm. high, and 3–5 mm. thick.[4]
   (1) With sides flaring at an angle of 45° and everted rims, which are sometimes decorated with V-shaped or thumbnail indentions.
   (2) With simply curved sides.
   (3) With slightly outcurved sides and everted rims.
   (4) With incurved sides (only very slightly curved throughout their greater extent, but sharply incurved near rim).
      (a) Undecorated.
      (b) With two or three incised lines on shoulder running parallel with rim.

Composite silhouette bowls, with upper portion outcurved and frequently incised; 15–20 cm. in diameter, 2–4 mm. thick.

Ollas: only one specimen specifically associated with a burial (fig. 23, *b*).

Cylindrical vessels with very slightly recurved sides and a series of parallel ridges near the rim; the same decoration may be repeated near the base. In addition, there may be a narrow rim flange and a simple curvilinear or zigzag incised design connecting the two series of ridges. Diameter 10–27 cm., height slightly more than half the diameter, thickness 4–7 mm.

Miniature vessels; small incurved bowls with absurdly thick bottoms (fig. 20, *c*).

[4] Very much larger sizes are represented in the general sherd collection from the same levels.

2. Yellow and Pink wares.

Color: The term "yellow" as used here has no specific color connotation, but serves merely to characterize the general appearance of the clay in contrast to red, gray, or black clays. It comprises various shades of cream, buff, and orange brown in the finished product. The term "pink" is likewise a loose one, denoting salmon and rose-colored hues with Maerz and Paul's 3–A–11 and 4–A–10 particularly common. In spite of the variability in color, these wares are in other respects (surface finish, paste texture, and vessel form) fundamentally the same.

Surface: Smooth, either chalky or soapy to the touch.

Paste: Compact, homogeneous, without visible temper, and of the same color as the surface. Broken edges quickly become smooth and soapy, and can be mended only with the greatest difficulty.

Forms: Simple silhouette bowls and dishes, diameter 10–36 cm., height 2.2–6 cm., thickness 2 to 6 mm.

a. With vertical sides.
b. With simply curved sides (fig. 17, *a*).
c. With incurved sides (fig. 17, *i*).
d. With outcurved sides.
e. With recurved sides.
    (1) Without supports.
    (2) With short conical supports (fig. 24, *d*).
f. With flaring sides.
    (1) With unmodified rim.
    (2) With overhanging rim.
    (3) With everted rim.
    (4) With everted rim and slab feet.

Composite silhouette bowls, diameter 12 or 13 cm., height about 6 cm., thickness only 1.5 to 2.5 mm.

a. Plain (fig. 19, *a*).
b. Fluted (like the white-slipped specimen, fig. 19, *c*).
c. Incised.

Ollas, maximum diameter 10–12 cm.

a. Flat-bottomed.
    (1) With vertical neck and everted rim (fig. 23, *a*).
    (2) With composite body and outcurved neck (fig. 23, *d*).
b. Globular with vertical neck (fig. 23, *c*).
c. With spout-handle.

Miniature forms.

a. Incurved forms.
    (1) With thick bottoms, like those of the Gray ware.
    (2) Very thin (fig. 29 *e*, shows a unique example).
b. Forms with flaring sides.
    (1) Moderately thick (fig. 20, *b*.).
    (2) Of such thickness that almost the entire capacity of the vessel is obliterated (fig. 17, *j*). One can hardly surmise the function of these vessels; some may be molds.
c. Recurved bowls about 3.5 cm. in diameter, 3 cm. high, and 1.5 mm. thick, with two small perforations near rim for suspension.
d. Olla-bowls with vertical necks; maximum diameter about 6 cm., height 4 cm., thickness only 0.5–1.0 mm.

2. Yellow and Pink wares—Continued.
Forms—Continued.
Aberrant forms.
a. Dish with angled sides (fig. 25, *a*).
b. Cylindrical vessel with basal groove and twisted rope design (fig. 28, *c*).
c. Incurved globular bowl with rim flange, decorated with conical bosses about 6 mm. in diameter and height, spaced approximately 1 cm. apart; diameter of orifice about 15 cm.
d. Olla with spout-handle and finely modeled human head.

3. Rust Red, rough ware.
Color: Maerz and Paul's 5–F–11 to 5–F–12 (Burnt Sienna).
Surface: Rough and uneven.
Paste: Coarse, well tempered, often sandy; of same color as surface.
Forms: Ollas, globular in form, with outcurved neck, of the shape shown in figure 23, *c*. These are the primary vessels of the surface burials. As such, the average maximum diameter is about 30 cm.; thickness, about 7 mm. Smaller specimens of this form also occur. The thinnest part of the vessel is the shoulder.
Bowls with loop-handle supports (fig. 25, *f*). Depth about 6 cm., diameter of orifice about 17 cm. The rim is wide and everted, and there is a more or less definite groove immediately under the rim. These vessels are rather rudely made. Frequently they were inverted and served as a cover for burial ollas, in which case they rested within the everted rim of the olla.
Comales (tortilla griddles). Only one specimen found (fig. 25, *c*).
Bowls with annular supports.
a. With support low and outcurved (fig. 19, *d*).
b. With support high and provided with vents, presumably to facilitate use as incensario (fig. 28, *b*).
Composite silhouette bowls.
a. Like the plain Yellow ware specimens.
b. With thick wall, sharp angle, and abrupt outcurve (fig. 19, *f*).
Aberrant forms.
a. Small dish with flaring sides, rudely made (fig. 28, *f*).
b. Miniature bowl or cup (fig. 25, *g*).
c. The chamber-pot form shown in figure 25, *d*.

4. Smothered ware.
This ware has been described in the sections on Middle Tres Zapotes. In addition to the forms noted there and illustrated in figure 8, the following aberrant specimens have been found in the surface burials of Upper Tres Zapotes:
Cylindrical vessel, about 10 cm. in diameter and 15 cm. in height, represented by three large sherds, two from the wall and one from the bottom of the vessel; inner surface black, lower part outside black, unblackened upper part covered with tan slip.
Incurved bowl with lugs (fig. 29, *d*).
Bowl with incised spiral design (fig. 25, *e*).

5. Porous White ware.
See description in section on Middle Tres Zapotes A. The ware is represented in surface burials by only two specimens, neither of which is complete. One is a composite silhouette bowl, incised; the other,

an incised cylindrical vessel of the type described under Gray ware in this section. A peculiarity of these vessels is the fact that the white color is limited to the exterior, the interior being of a light-gray color. The characteristic texture and light weight of the specimens, however, readily distinguish them from those specimens of Smothered ware in which the black area has paled to a gray.

6. Speckled ware.

The general characteristics of this ware have been noted in connection with Middle Tres Zapotes B. In Upper Tres Zapotes, however, a special modification appears in the form of effigies on the necks of the ollas. The effigies are very crudely executed representations of human and simian heads (fig. 29, *a*, *b*, *c*). Protrusions on the inner surface of the vessel, as shown in the profile view (fig. 29, *a*), demonstrate that the perforations made for eyes, ears, and mouth were punched into the wet clay. There is, however, considerable variability in the treatment of anatomical details. In *a* each eye is represented by a pair of deep circular depressions. Similar depressions stand for the corners of the mouth and the ears, the latter being reenforced by a ridge along the outer and lower rim. In *b* each eye is represented by three minute circular depressions, while similar depressions denote both the corners of the mouth and the openings of the nostrils, and whereas in *a* no lips are shown, here they are represented by parallel ridges. The ears in this case occupy a position on the same level with the mouth. In *c* the eyes are represented by concentric circular ridges. Both *a* and *b* have the Indian Red slip which, as we have seen, was characteristic of this ware in Middle Tres Zapotes B. (See also pl. 56 and accompanying discussion.)

II. MONOCHROME WARES

1. White ware.

Slip: Like that of the Normal White of Middle Tres Zapotes B.

Surface: Smooth.

Paste: Identical with the unslipped Yellow and Pink wares.

Forms: Practically all those listed under Yellow and Pink wares and, in addition, the following notable or aberrant forms:

Large incurved storage vessels of the shape seen in figure 17, *h*, but much larger (up to 40 cm. in diameter).

Deep tripod bowl with curved sides, flat bottom, and nipple-form supports (fig. 24, *c*).

Olla bowls with a maximum diameter of about 10.5 cm. and a height of 5.5 cm.

Ollas of unusual shape.

a. With piriform body (fig. 23, *f*).

b. With shoulder flange (fig. 23, *g*).

c. With strap-handle (inside diameter of neck 7.5 cm.).

Miniature jar with three loop handles.

2. Black ware.

Slip: Black.

Surface: Smooth, generally shiny.

Paste: Fine-grained, homogeneous, dark gray or black; rarely red. (Coarse-textured in vessels of unusual size.)

2. Black ware—Continued.

Forms: Simple silhouette bowls and dishes (to diameter of 40 cm.).

a. With curved sides (fig. 17, *c*).

b. With flaring sides.

(1) Without supports (fig. 21, *a*).

(2) With slab feet (fig 21, *b* and *d*).

Bowls with beveled rim flange (fig. 22, *c*).

Composite silhouette bowls.

a. With ledge about half way below rim.

b. With rounded bottom and slightly outcurved sides.

c. With overhanging upper section (fig. 19, *b*).

d. With angled sides (fig. 22, *a* and *b*).

Cylindrical vessels (to 29 cm. in diameter).

a. With slightly recurved sides (fig. 22, *e*).

b. With straight sides.

c. With rim flange and flaring rim (fig. 22, *d*).

Miniature incurved bowls with thick bottoms.

Decoration: Nearly all surface burial Black ware vessels are decorated. Three principal types of decoration occur:

a. Parallel furrows (fig. 19, *b*; fig. 22, *a*).

b. Incisions through slip, sometimes filled with red pigment (fig. 22, *b*).

c. Incisions not through slip (fig. 22, *c*).

Design elements:

a. Parallel lines.

b. V-shapes.

c. Cross hatching.

d. Concentric circles.

e. Rectangular enclosures with rounded corners.

f. Steps.

g. Angular meander.

3. Rust Red, smooth ware.

Slip: Like that of the Rust Red ware of Middle Tres Zapotes B but more lavishly applied.

Surface: Smooth, more uniformly even, and better polished than that of Middle Tres Zapotes Rust Red.

Paste: Less porous, more evenly fired, more finely tempered than in Middle Tres Zapotes; rust red in color except in the case of the tripod bowl shown in figure 24, *b*, which, if it were to be classified on the basis of paste, rather than slip, would have to be listed as Yellow ware.

Forms: Olla bowls with a maximum diameter of 8.5 to 10 cm. and height of 4.5 to 6 cm. A typical specimen is shown in figure 26, *b*. However, instead of being flat, the bottom may be either round or slightly concave as viewed from the outside.

Aberrant forms.

a. Olla bowl with conical supports, furrowed to imitate melon (fig. 24, *b*).

b. Composite silhouette bowl, outside rough, inside slipped and polished. The paste is coarse and sandy like that of the Rust Red, rough ware. The upper section of the bowl has vertical sides and carries an incised design of cross hatching arranged in step form. The tiny squares thus marked out show traces of red paint.

4. Reddish-Brown ware.

Slip: Maerz and Paul's 6–A–12, Rust Sorolla.

Surface: Smooth.

Paste: Like that of the Rust Red, smooth ware, in the case of the olla bowls; otherwise, identical with the Yellow ware. The commonest color is buff.

Forms: Olla bowls like those of the Rust Red, smooth ware.

Simple silhouette dishes.

a. With curved sides, similar to figure 17, *b;* slipped on inside only.

b. With flaring sides.

(1) Plain rim (fig. 17, *e*).

(2) Everted rim with grooved decoration (fig. 17, *g*).

c. With outcurved sides, diameter of base 13.5 cm., diameter of orifice 22 cm., height 4.5 cm., thickness 4 mm. In this case the colored slip overlays a white one.

Plate with concave bottom, flaring sides, and rim directed outward (fig. 25, *b*).

5. Orange ware.

a. Normal.

Slip: Maerz and Paul's 4–C–12 in color, generously applied.

Surface: Smooth.

Paste: Identical with the unslipped Yellow and Pink wares.

Forms: Simple silhouette dishes with flaring sides. A typical specimen is 12 cm. in diameter at the bottom, 17 cm. in diameter at the top, 3.4 cm. high, and 6 mm. thick.

Small ollas with everted rims, height about 7 cm., diameter of orifice slightly less, thickness 2 to 5 mm. On the outside only the bottom is left unslipped; on the inside the neck only is slipped.

b. Aberrant: This ware has a sort of blood-orange color (Maerz and Paul's 4–F–12, Mosque) and a brilliant polish. It is represented in our collections by only one specimen, the large sherd shown in figure 88, *g*, and is presumably an importation from the Huaxteca, since it is only in collections from that region that the ware is at all common. An intrusive vessel of this ware, of exactly the same shape as our specimen, may be seen in the Tarascan collection of the American Museum of Natural History.

6. Dark Brown ware.

Slip: A dark woody brown in color (Maerz and Paul's 7–L–12, Caldera) and of good quality.

Surface: Smooth.

Paste: Identical with Gray ware.

Forms: Simple silhouette dishes.

a. With outcurved sides.

b. With flaring sides and slab feet.

(These forms have incised designs similar to those on the corresponding Black ware forms.)

Composite silhouette vessels in which both upper and lower sections are cylindrical, but the upper section is of greater diameter. The union of the two is accomplished by a right-angle bend and marked on the external by a narrow flange.

7. Dubonnet Red ware.

Slip: A fugitive red of a shade highly reminiscent of Dubonnet wine (Maerz and Paul's 6–J–3 to 7–H–5).

Surface: Smooth.

Paste: In some cases identical with that of the Yellow, in others, the Gray ware.

Forms: Miniature plates, like that shown in figure 20, *a*, which may originally have had the red slip outside as well as inside, for this slip frequently overlays white.

Gourd forms (fig. 18, *a*).

Small ollas, represented by one incomplete specimen having a neck 5 cm. long and a diameter of 5.5 cm. The rim is flat and level.

Simple silhouette dishes with curved sides. A typical specimen has a diameter of 14 cm., height of 2.8 cm., and thickness of 2 mm.

Aberrant hourglass form (fig. 19, *e*).

Spoollike objects with square ends. The only complete specimen is 11 cm. long and has an outside diameter of 3 cm. The ends measure 5.4 cm. to the side and have rounded corners.

III. PSEUDODICHROME WARES

These wares are primarily the unslipped Yellow ware decorated with bands, stripes, or circular patches in one of the pigments employed in manufacturing the ordinary monochrome wares. The contrast between the color thus applied and the natural color of the fired clay, usually cream or buff, creates a dichrome effect. The following colors have been used in this way:

1. Orange, like that of the Normal Orange ware, but either more thinly spread or else partly lost.
2. Brown, varying from the reddish brown of the Monochrome ware to a definite tan.
3. Black, always dull and largely worn off.
4. Dubonnet Red.

The principal forms among the burial vessels are:

Plates with flaring sides and everted rim. A typical specimen has a diameter of 25.5 cm. at the rim, a height of 5 cm., and a thickness of about 5 mm. The only decoration is a black band along the rim. It is, is course, possible, however, that additional design elements, perhaps in other colors, were once present—a possibility which would upset the classification here adopted.

Simple silhouette, round-bottomed dishes with diameters of 16 to 19 cm.; height, 4.3 to 5 cm.; and thickness of only 2 or 3 mm. These dishes have traces of either brown or red decoration. The designs are too fragmentary for reconstruction.

Recurved bowls with band of orange on outside (fig. 26, *d*) or with design in brown (fig. 27, *c*).

IV. DICHROME WARES

1. Dubonnet Red-and-Orange.

   This is the commonest of the dichrome wares. Fundamentally it is made up of Orange ware vessels with a rim band of Dubonnet Red, generally on the inside, but sometimes present on the outside as well. There are three main forms, all of them of simple silhouette:

   Bowls with curved sides, about 19 or 20 cm. in diameter and 6.5 to 8 cm. high. In one case, the Dubonnet border is 4 cm. wide.

   Bowls with recurved sides, the red border present both inside and out (fig. 26, *c*).

   Bowls with flaring or slightly outcurved sides. These may exceed 30 cm. in diameter. Several of them exhibit remarkable, streamlined, incised rabbit figures in profile, vividly expressive of movement and quite modern in feeling (fig. 26, *f*). The incisions extend through the slip. Near the base of the vessel runs an incised horizontal line and above this a series of wide crescents. The rabbit figure itself and the incised zone at the base are painted red, while the rest of the surface is left orange. In this case there is no rim band.

2. Dubonnet Red-and-Dark Brown.

   The one example of this combination is the very aberrant form shown in figure 26, *e*. Here the vessel was originally gray. The entire outer surface, except the bottom, is painted red, and there is an inner rim band of dark brown. Below this band the inner surface is unslipped.

3. Dubonnet Red-on-White.

   This ware is likewise represented by only one specimen (fig. 27, *a*). Not enough of the design remains for reconstruction.

4. Brown-on-White.

   The only example is the small olla with loop handles shown in figure 27, *h*. Much of the decoration is erased.

5. Black-on-Rust Red (fig. 28, *a*).

6. Black-on-Dubonnet Red.

   This ware is represented by the very beautiful gourd-shaped vessel shown in figure 18, *b*. The design is blocked out by incisions through the slip and further elaborated by lines scratched upon the black field. The bottom of the vessel is not slipped and reveals a buff-colored clay.

V. PSEUDOTRICHROME WARES

These differ from the pseudodichrome only in that two colors instead of one enter into the design. The following combinations occur:

1. Red-and-Black, illustrated by:

   a. A plate of the type described under the Pseudotrichrome of Middle Tres Zapotes B, but smaller—4.8 cm. in height and 24 cm. in diameter. Curiously enough, the colors in this specimen are reversed, bands which in the earlier (?) specimen were red now being black, and vice-versa.

1. Red-and-Black, illustrated by—Continued.
   b. A simple silhouette bowl with rounded bottom and vertical sides, 12 cm. in diameter, 3.2 cm. in height, and 2 mm. in thickness. The interior has a red slip and a black band along the rim, but the exterior exhibits two black and one red band upon an unslipped, buff-colored background, the red band being the lowermost.
   c. An incurved, simple silhouette bowl, 14 cm. in height and 20 cm. in diameter at the orifice. There is a black rim band on both inner and outer surfaces. The upper third of the vessel, both inside and out, is painted red, and externally the lower border of the red area is marked by two close, parallel, narrow, black lines. On the exterior, within the red zone, occur a series of fairly large, black, circular areas each surrounded by a line of black dots.
2. Red-and-Orange, illustrated by:
   A small olla, the neck of which is painted orange, while the outturned rim is decorated on its upper surface by a band of red. This vessel is about 9.5 cm. in height, of which 3.3 is represented by the neck.
3. Brown-and-Black, the only example of which is to be seen in figure 27, *d*.

VI. TRICHROME WARES

Four vessels from the burial material illustrate these wares. The fugitive character of the decoration, however, suggests that other vessels, which we are now compelled to assign to a different classification, may well have belonged originally to this group. The color combinations extant are:

1. Red-and-Black on White or Cream, illustrated by:
   a. The very beautiful spouted vessel with strap-handle shown in figure 27, *g*.
   b. The large chili grinder shown in figure 28, *d*, which is decorated also on the interior.
   c. A plate with flaring sides and everted rim, 6 cm. in height and about 35 cm. in diameter, having a red rim-band 1.1 cm. wide and showing traces of red and black circles near the junction of sides and bottom.
2 Dubonnet Red-and-Orange on White, illustrated by:
   A simple silhouette, flat-bottomed bowl with vertical sides (diameter of base 9 cm. and of orifice about 18 cm., height 7.3., thickness 6 mm.), which had received first an overall white slip, then a coat of orange on the interior, while the flat horizontal rim was painted red.

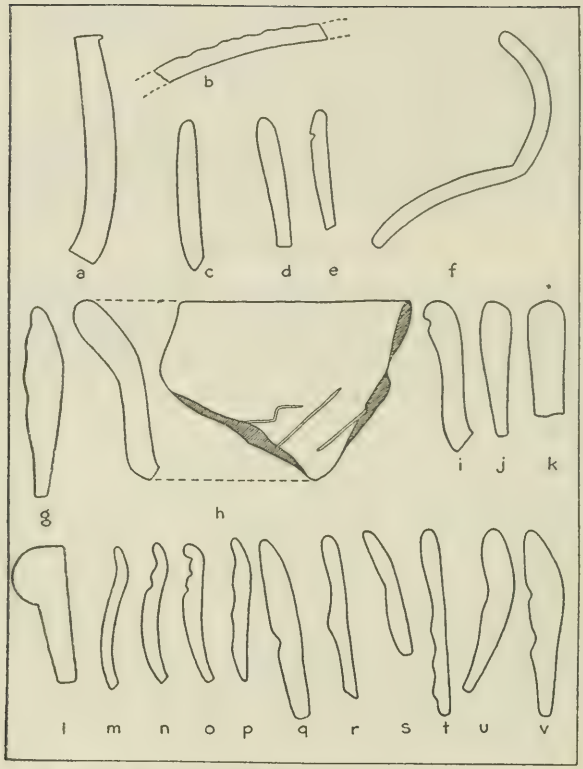


FIGURE 1.—Unslipped or partially slipped wares.

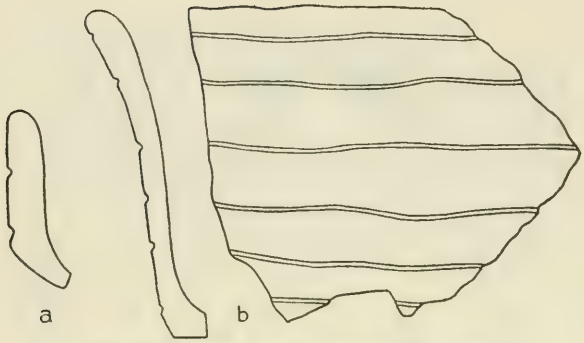


FIGURE 2.—Black ware, incised before firing.

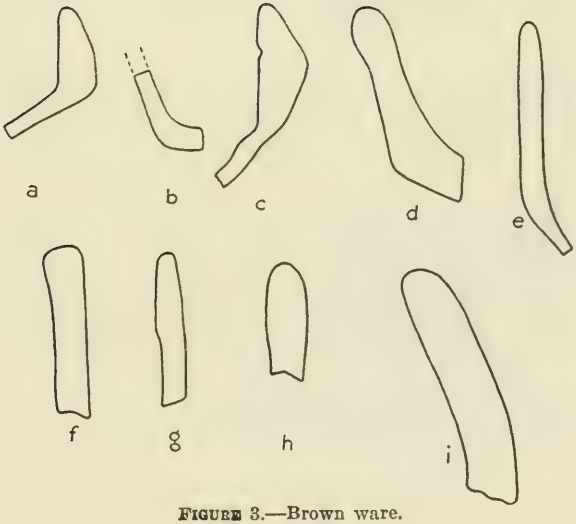


FIGURE 3.—Brown ware.

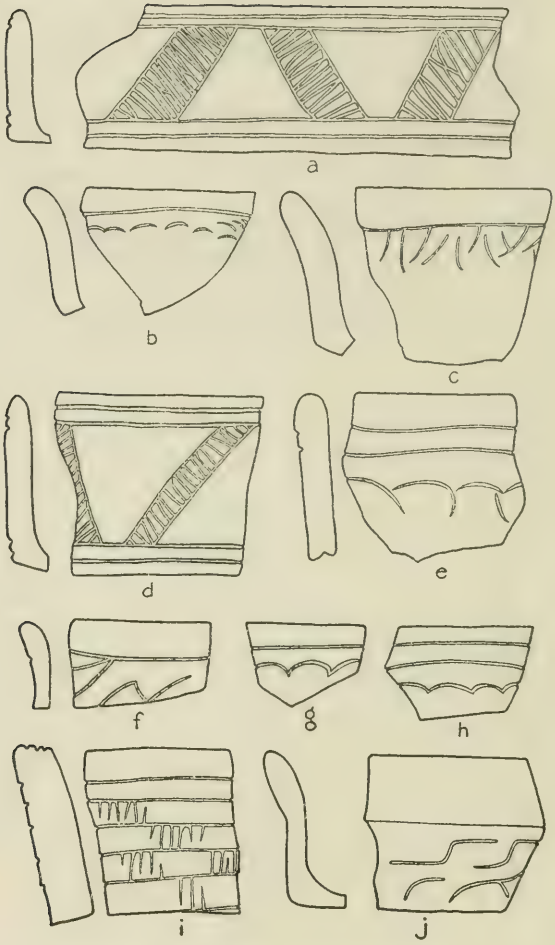


FIGURE 4.—Black ware, incised after firing.

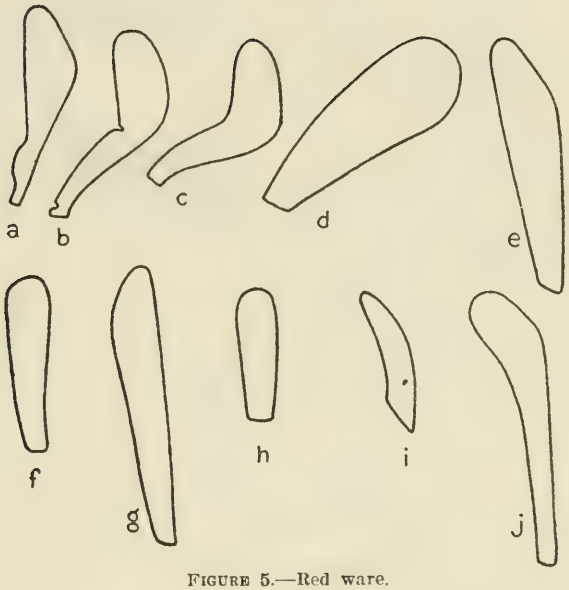


FIGURE 5.—Red ware.

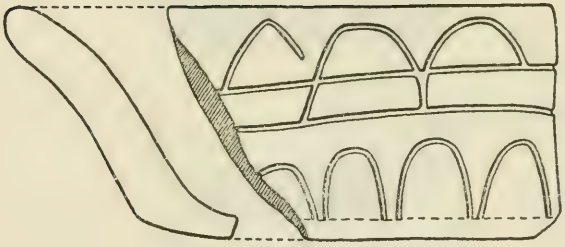


FIGURE 6.—Red-and-White Incised ware.

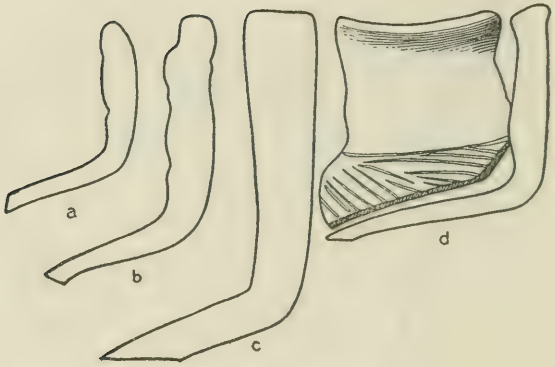


FIGURE 7.—Necks of Speckled ware.

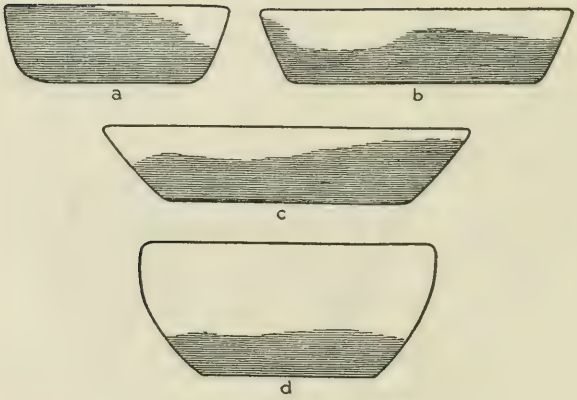


FIGURE 8.—Smothered ware.

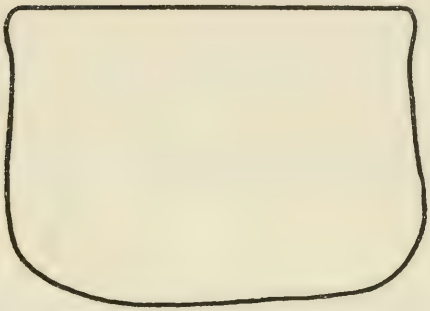


FIGURE 9.—Porous White ware bowl.

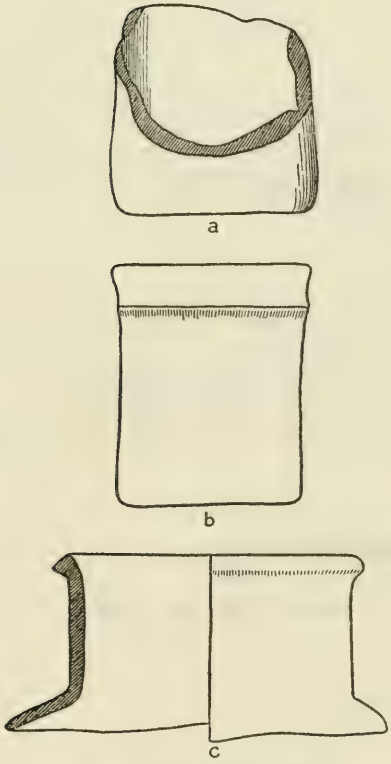


FIGURE 10.—Vessels of Normal White ware.

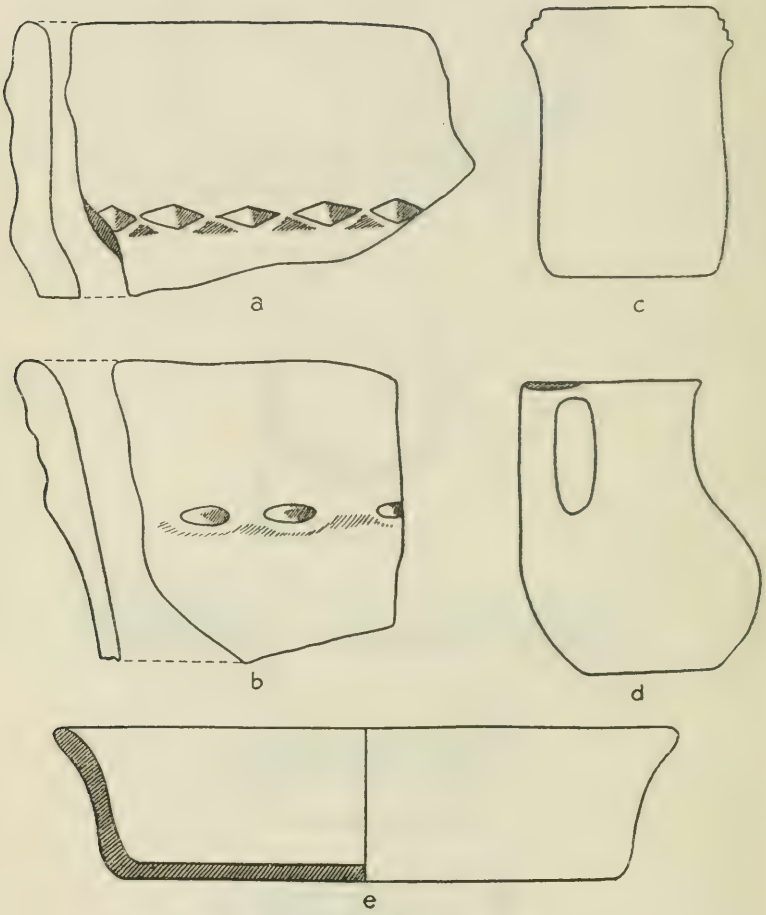


FIGURE 11.—Modified Black ware.

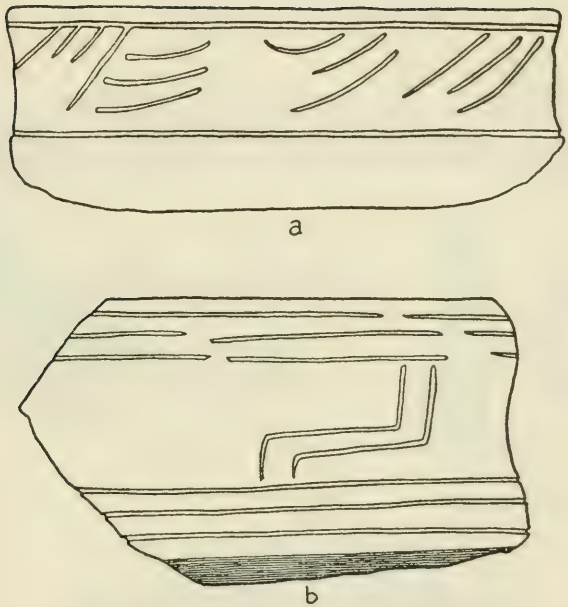


FIGURE 12.—Black ware incised before firing.

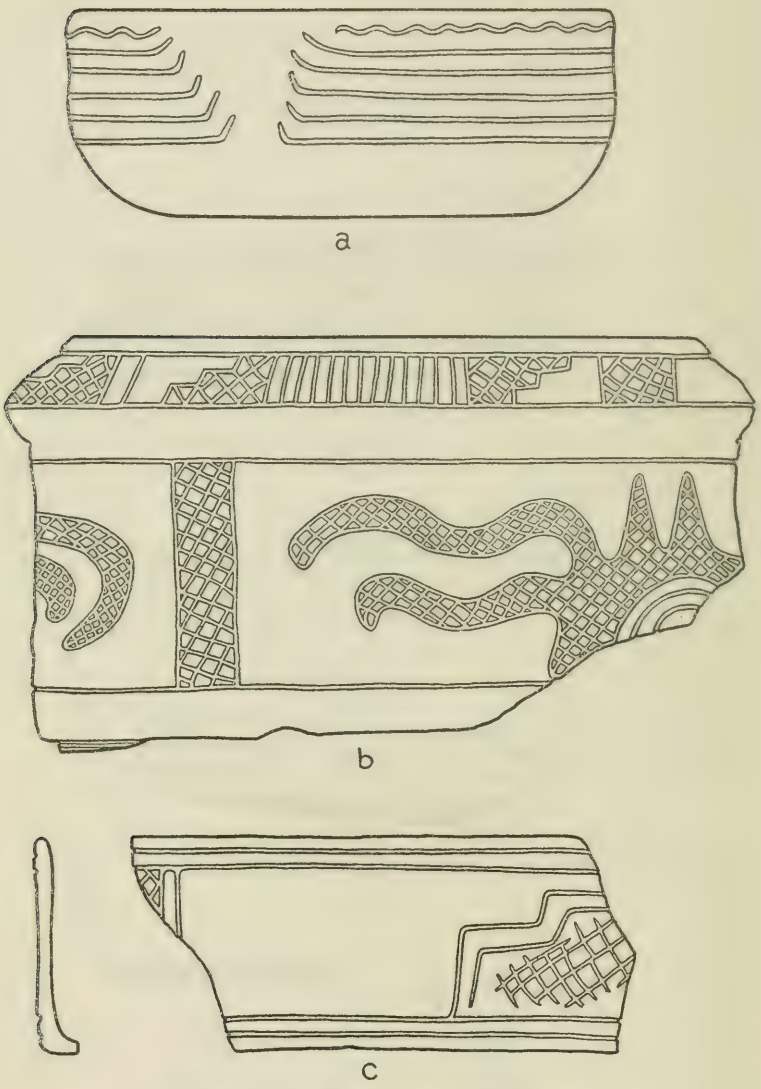


FIGURE 13.—Black ware incised after firing.

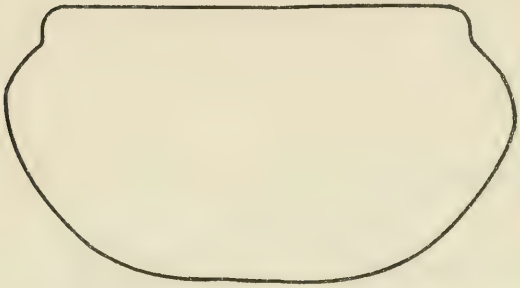


FIGURE 14.—Rust Red vessel.

FIGURE 15.—Dead-leaf Brown ware bowl.

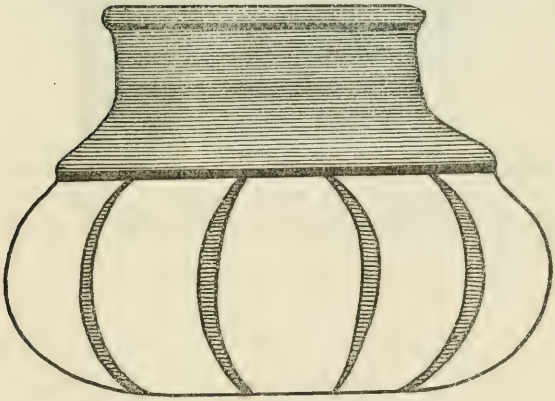


FIGURE 16.—Pseudodichrome olla.

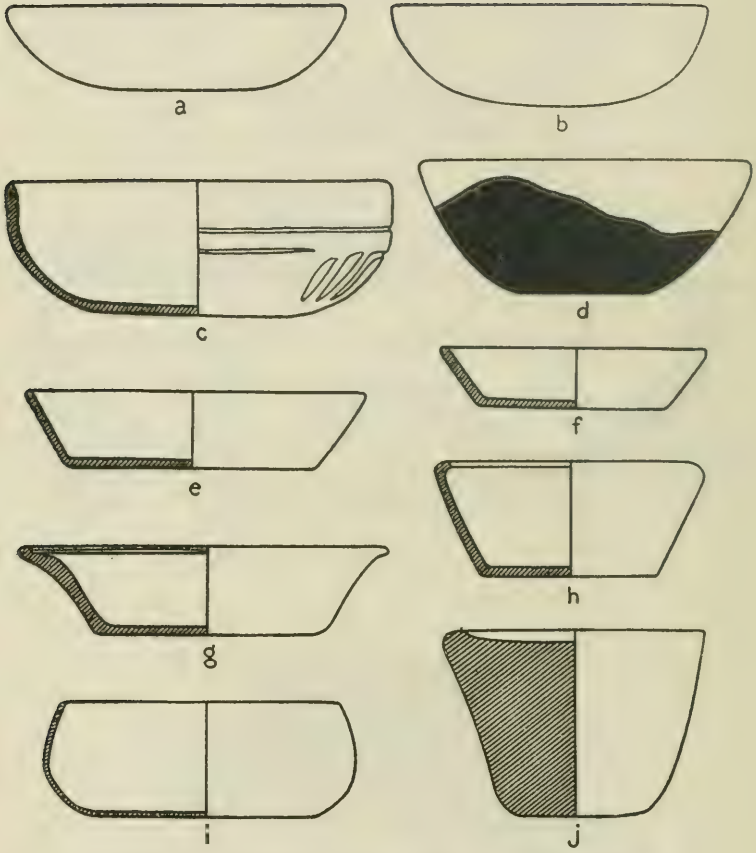
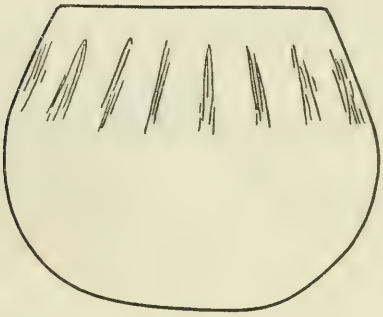
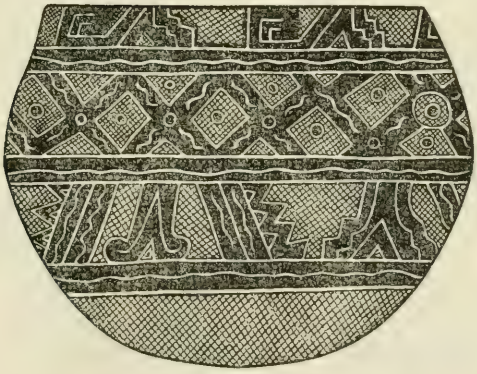


FIGURE 17.—Simple silhouette bowls from surface burials.



a



b

FIGURE 18.—Gourd forms from surface burials.

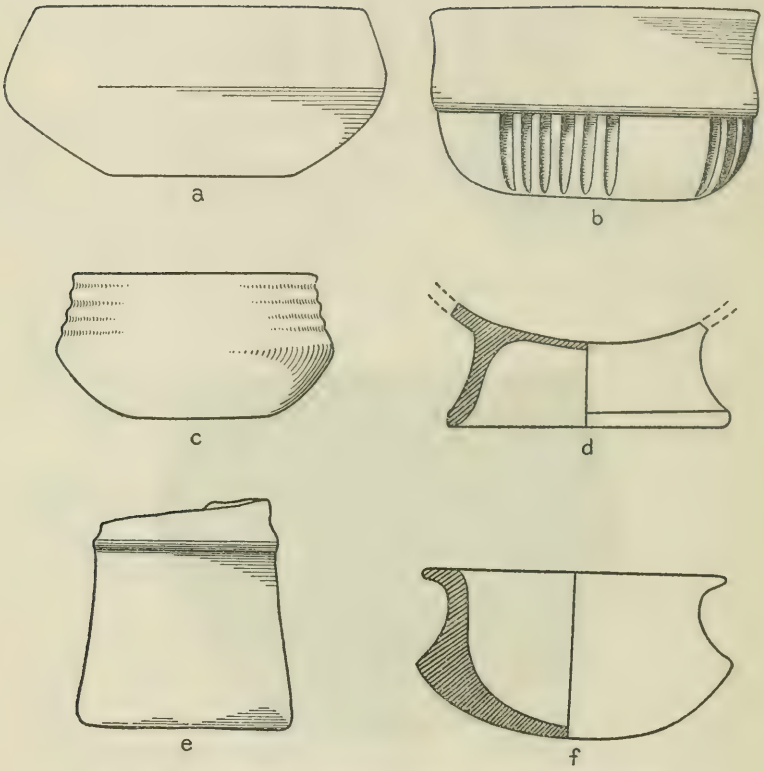


FIGURE 19.—Composite silhouette forms from surface burials.

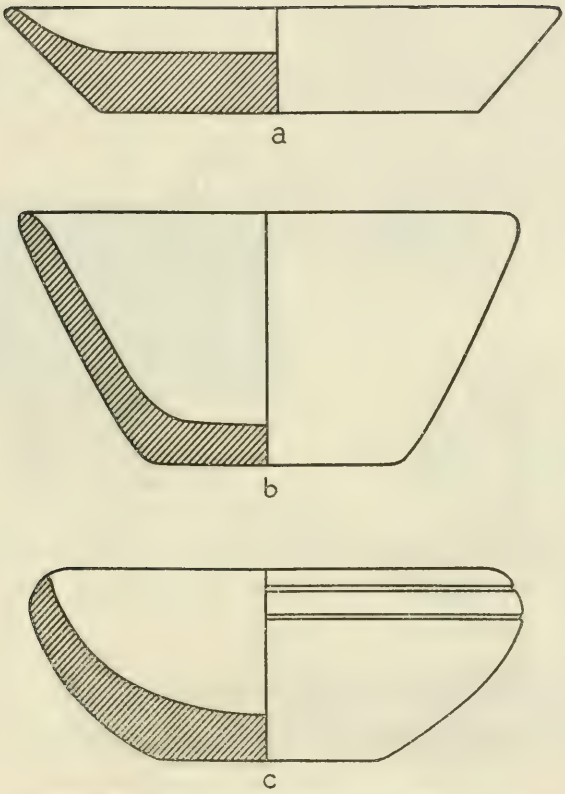


FIGURE 20.—Miniature vessels from surface burials.

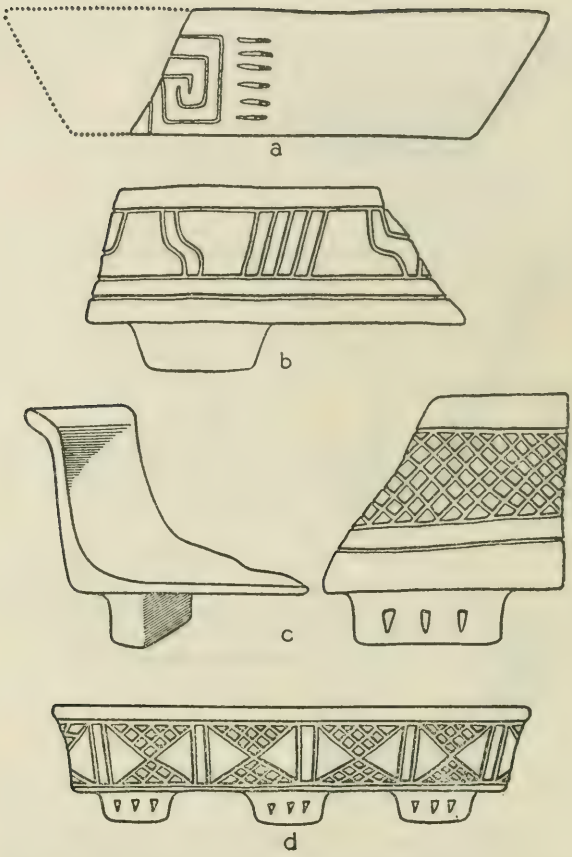


FIGURE 21.—Black and Dark Brown wares, incised before firing.

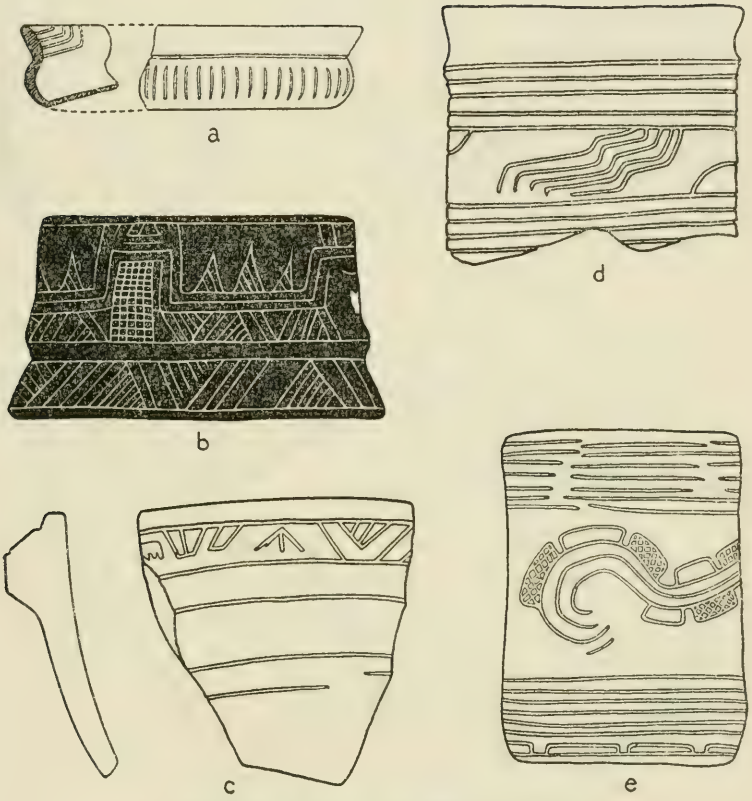


FIGURE 22.—Black Incised ware from surface burials.

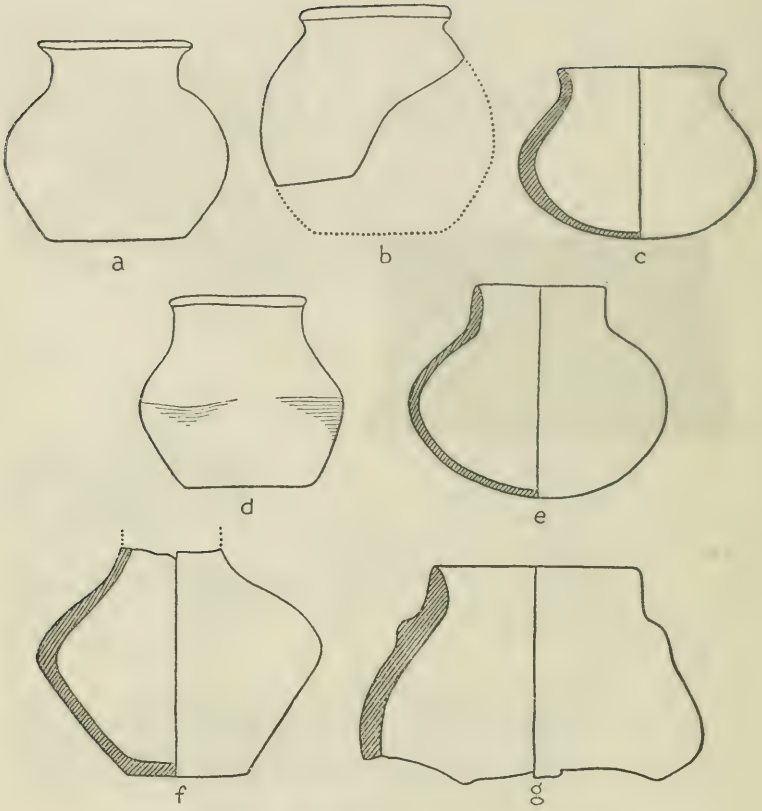


FIGURE 23.—Olla forms from surface burials.

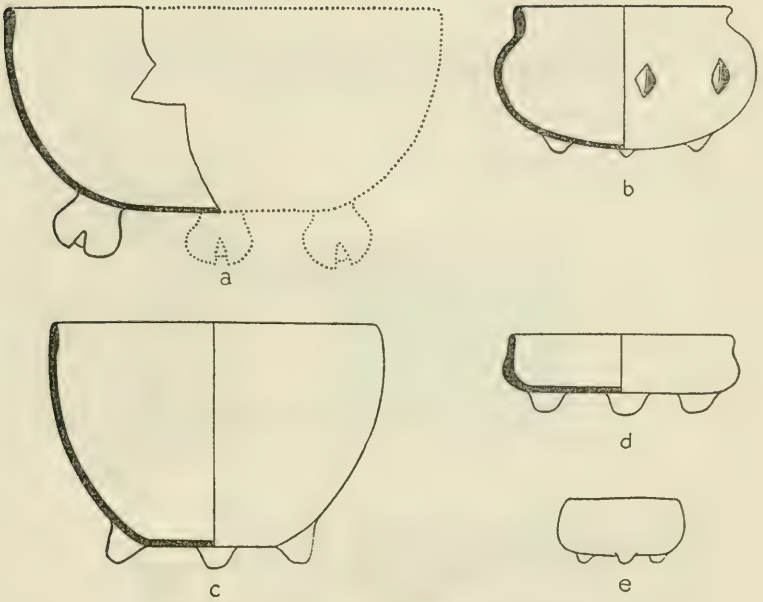


FIGURE 24.—Surface burial vessels with supports.

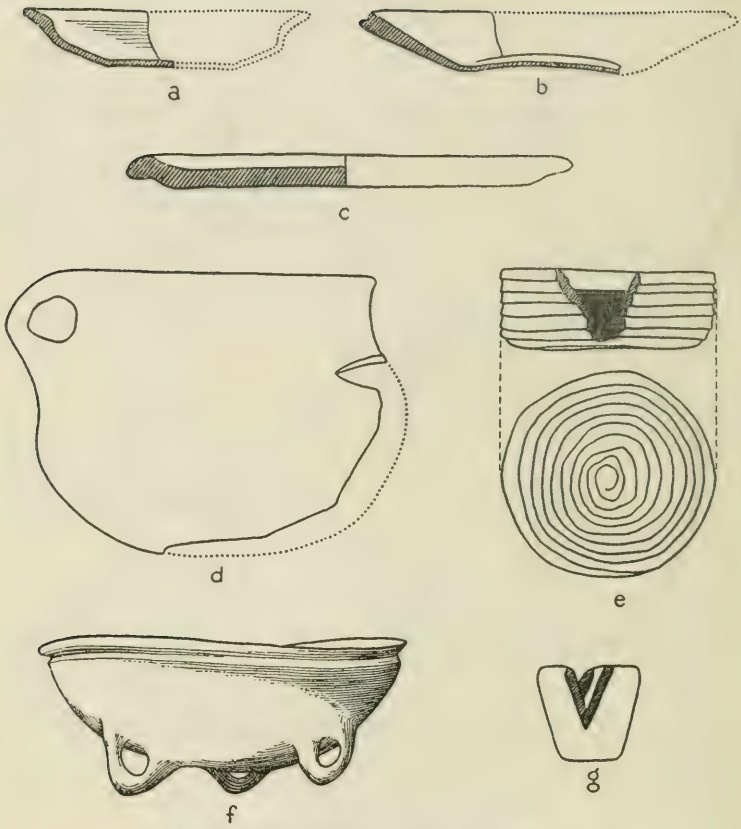


FIGURE 25.—Miscellaneous vessels from surface burials.

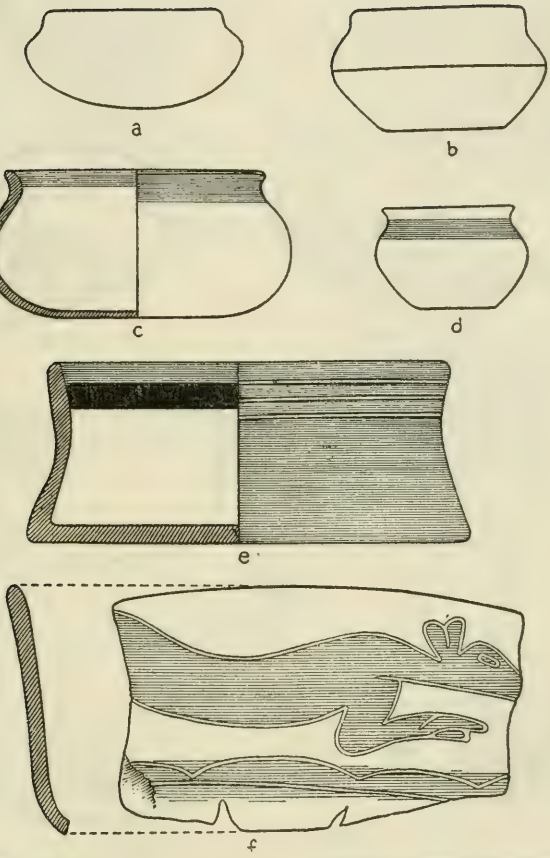


FIGURE 26.—Monochrome, Pseudodichrome, and Dichrome vessels from surface burials.

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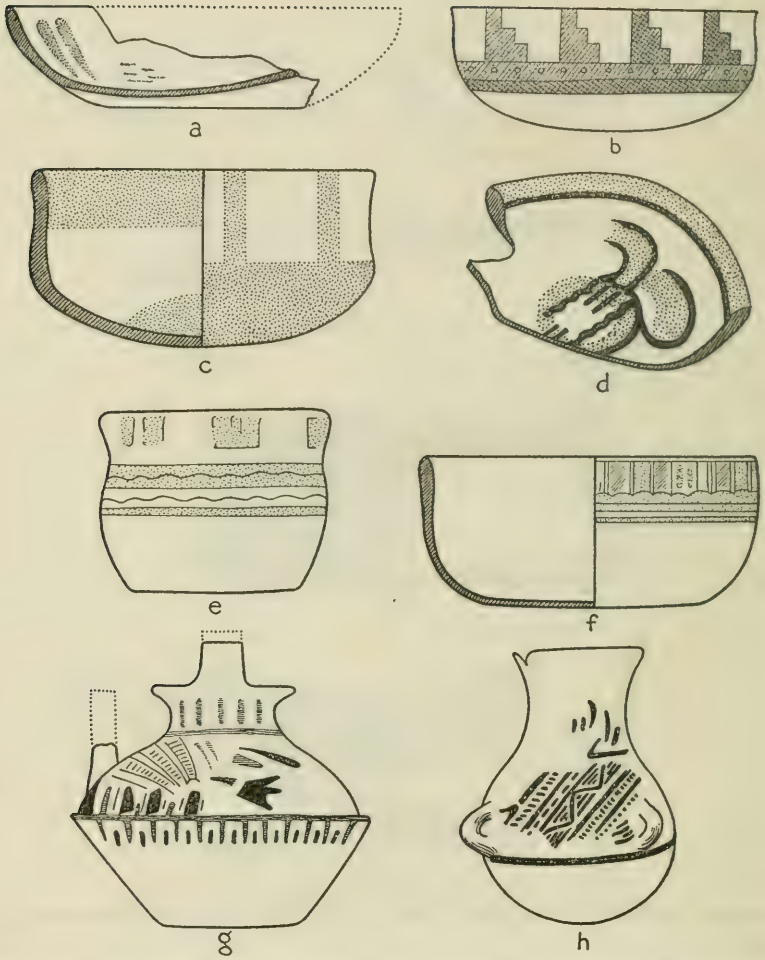

FIGURE 27.—Dichrome, Pseudotrichrome, and Trichrome vessels from surface burials.

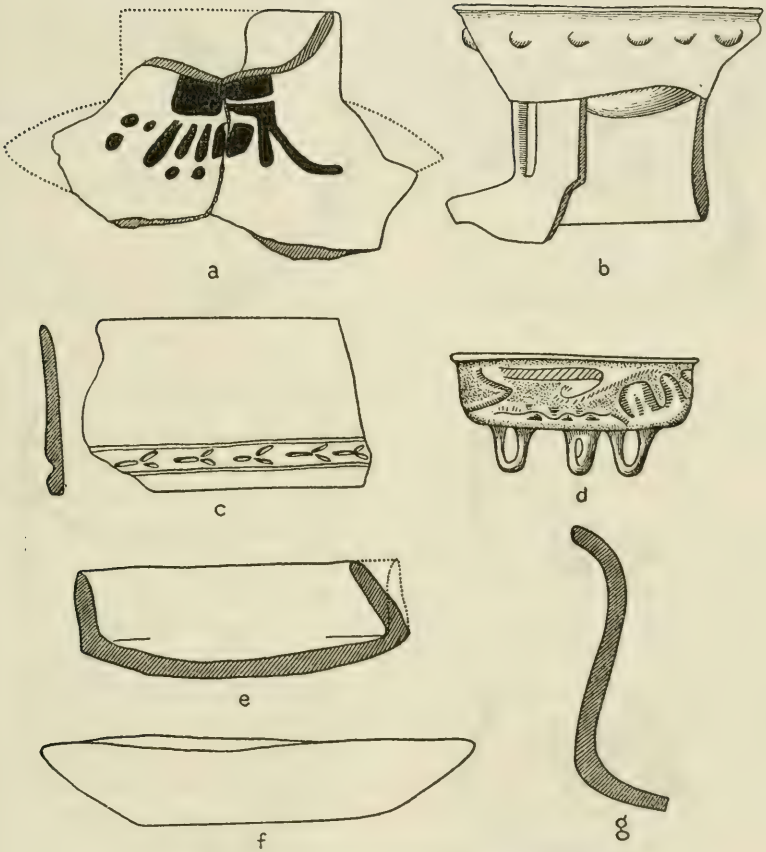

FIGURE 28.—Miscellaneous vessels from surface burials.

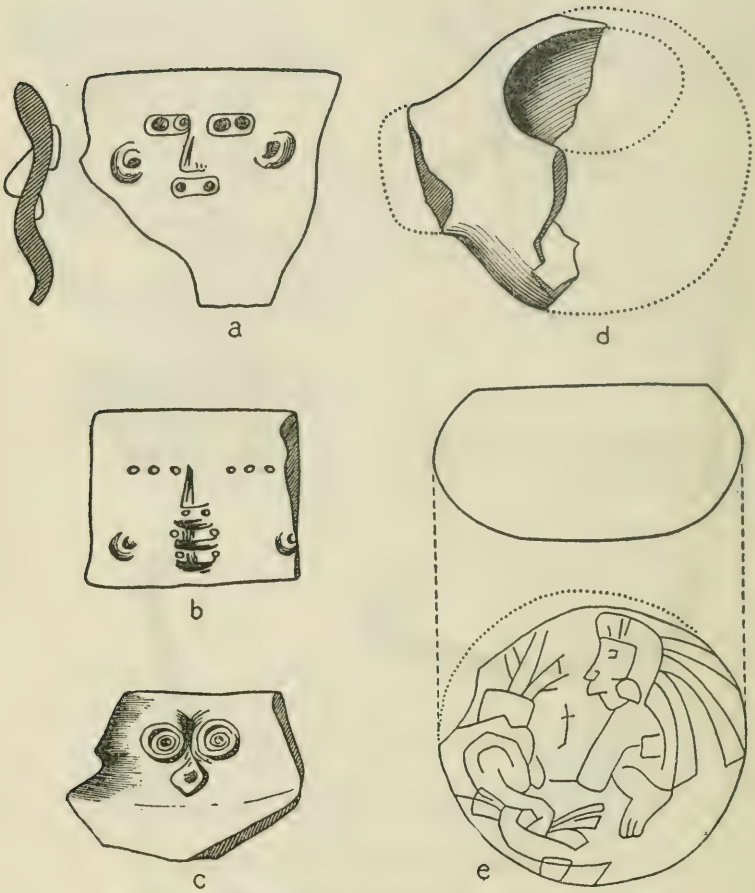

FIGURE 29.—Miscellaneous specimens from surface burials.

THE GENERAL RANCHITO COLLECTION

From the excavations at the Ranchito site, particularly in the areas just north and east of Mound D and between Mounds D and A, approximately 10,000 representative sherds were collected. The material includes, also, sherds from the mounds themselves (A, C, D, E, and F). Except for Polychrome, the bulk of which came from Mound C, the material did not differ from one excavation to another within the Ranchito mound area, and except for certain minor details indicated on map 7, stratigraphic differentiation was not apparent. Whole vessels were rare. Manos and metates almost without exception were broken. One got the impression that there had been a general destruction, perpetrated, in all probability, by hostile invaders.

WARES AND THEIR RELATIVE FREQUENCY

All wares which have been noted in connection with Middle Tres Zapotes B and Upper Tres Zapotes were present. In addition we have:

1. Rough Yellow ware.—In texture and general appearance this is quite like our Rust Red, rough ware, except that the clay is yellowish in color. In considering the proportions of the various wares present in the general Ranchito collection, we shall class these two wares together under the single designation of Rough ware.

2. "Stick-polished" ware.—The rough Yellow ware was occasionally slipped on the inside, most often with rust red, but sometimes with Dubonnet or orange, and subsequently decorated with a design in the same color rendered more intense. The surface to be decorated was first polished. As for the technique of achieving the design, Dr. Vaillant, on seeing a few specimens of this ware, noted a similarity to the Stick-polished ware of Teotihuacán, in which the design is effected by polishing with the blunt end of a stick. After examining all the specimens, I am uncertain whether the same technique was employed in this case, or whether the design was simply painted on with a second coat of the original pigment. We may, at any rate, for lack of a better name, tentatively call this ware "Stick-polished," leaving to future research the task of determining whether the suggested analogy to the Teotihuacán ware is valid or not. The designs take the form of parallel bands or lines, zigzags, and meanders. (See fig. 51, p. 82.)

3. Sculptured ware.—This is a special case of the Gray, Black, White, and unslipped Yellow wares, the term referring to the technique and style of decoration. Sculptured ware is discussed in connection with plate 57 (q. v.).

4. Polychrome.—True Polychrome of a somewhat unusual character was obtained in relatively small quantities chiefly, but not exclusively, from Mound C. This will be described in connection with the general subject of sherds with painted decoration.

The following tabulation shows the approximate proportions in which the various wares occur in the general Ranchito collection:

Ware	*Percent*
1. Porous White	0.4
2. Yellow and Pink, unslipped	14.8
3. Gray	12.8
4. Smothered	4.0
5. Rough and Speckled wares	15.7
6. White	14.7
7. Black	13.8
8. Modified Black	4.0
9. Rust Red, smooth	7.0
10. Reddish Brown	4.4
11. Dark Brown	1.0
12. Orange	1.0
13. Dubonnet Red	2.0
14. Stick-polished	.4
15. Dichrome	2.0
16. All other painted sherds	2.0
	100.00

These approximations were arrived at by counting the sherds which had been sorted in the laboratory, allowance being made for the circumstance that, except for sherds having painted decorations (all of which were saved), the sherds shipped out for study represented roughly one-third of the bulk of sherds actually collected in the field.

CLASSIFICATION AND ENUMERATION OF SHERDS WITH PAINTED DECORATION

1. Pseudodichrome (background in natural color of the clay; cream, buff, or orange).

Design	*Paste*	*Number*
Black	Rust (1), orange (2)	3
Rust red to brown	Cream or orange	24
White or cream	Buff	2
Dubonnet red	Orange with gray core	19

2. Pseudotrichrome (background as for Pseudodichrome).

Design	*Paste*	*Number*
Dubonnet-and-black	Orange	11
Dubonnet-and-brown	Cream	1
Dubonnet-and-white	Orange with gray core	24
Dubonnet-and-orange	Cream	10
Rust red or brown-and-black	Cream or orange with gray core	15
Orange-and-dark brown	Cream	2

3. Dichrome.

Design	*Paste*	*Number*
a. With white as background:		
Black	Buff	10
Dubonnet	Buff	7
b. With orange as background:		
White	Orange with gray core	1
Dubonnet (with incised outlines).	Gray	16

4. Trichrome (with white background).[5]

Design	*Paste*	*Number*
Dubonnet-and-black	Peach	5
Dubonnet-and-brown	Cream	1
Black-and-rust red	Peach	?

5. Special cases.

Exterior	*Interior*	*Paste*	*Number*
Plain white	Plain orange	Buff	1
Dark brown	Light brown	Orange	1
White-on-orange	Dubonnet on unslipped background.	Orange with gray core.	1

6. Polychrome.

A small number of sherds of genuine Polychrome of unusual beauty as regards both color and finish were obtained. Two of these are illustrated (fig. 31, *a* and *c*). The white of these specimens resembles polished ivory, but tends to lose its luster on washing. The other colors in *a* are black, garnet (Maerz and Paul's 7–J–6), and buff. In *b* they are pale rose (Maerz and Paul's woodland rose, 4–A–10), maroon (7–L–8, mascara), and rust (5–G–12). The inner surface of *a* is dotted with tiny splotches of garnet on a cream-colored background, while that of *b* is white except for a maroon band, about 1 cm. in width, along the rim. It may be noted that there is considerable resemblance between the ivory of this ware and the ivory finish which characterizes one of the wares of El Tajín studied by Du Solier, of the Instituto Nacional de Antropología e Historia of Mexico. The paste, however, differs sharply in the two cases, and there can be no question of identity between them. Eduardo Noguera, on seeing these sherds, expressed the opinion that they resemble nothing hitherto found in Mexico with the possible exception of certain material from the State of Hidalgo. It should, however, be mentioned that they are of the same cream-colored and orange pastes as the other painted sherds just enumerated. Despite their scarcity, therefore, they can hardly be assumed to have been imported to Tres Zapotes.

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[5] In the foregoing cases, colors listed under design refer to the outer surface of the vessel. In approximately half of the rim-sherd specimens a similar design (or design in the same colors) occurs also on the inner surface. When the inner surface does not exhibit a design, it is of the same color as the background color of the outer surface.

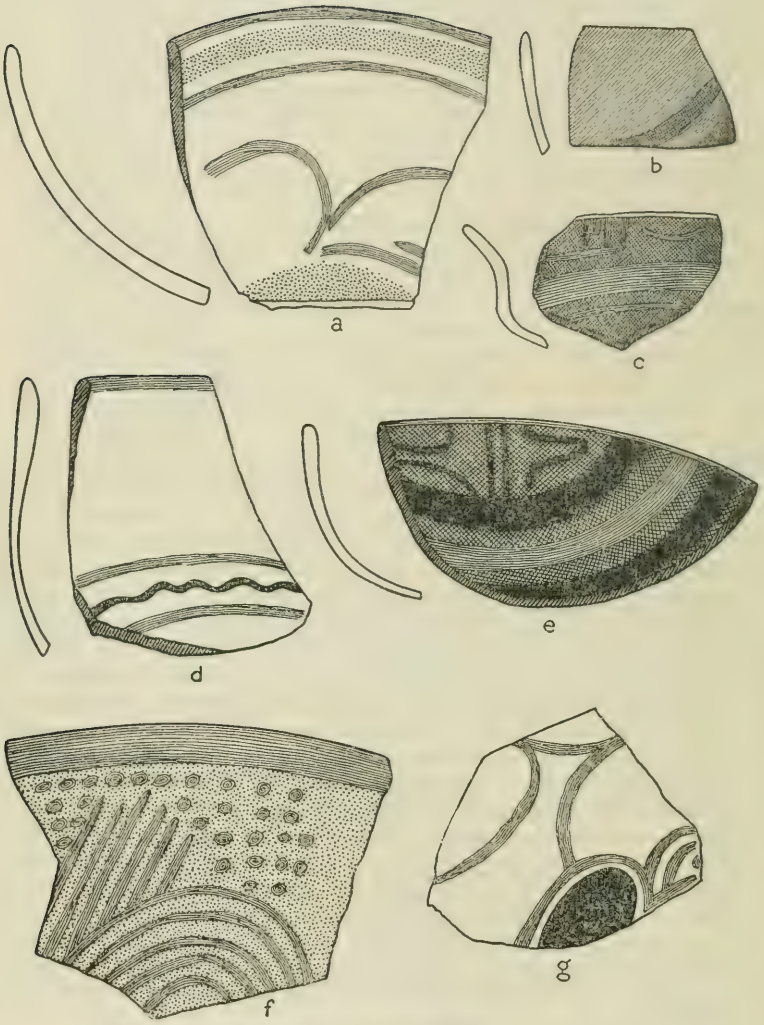

FIGURE 30.—Sherds with painted designs on inner surface.

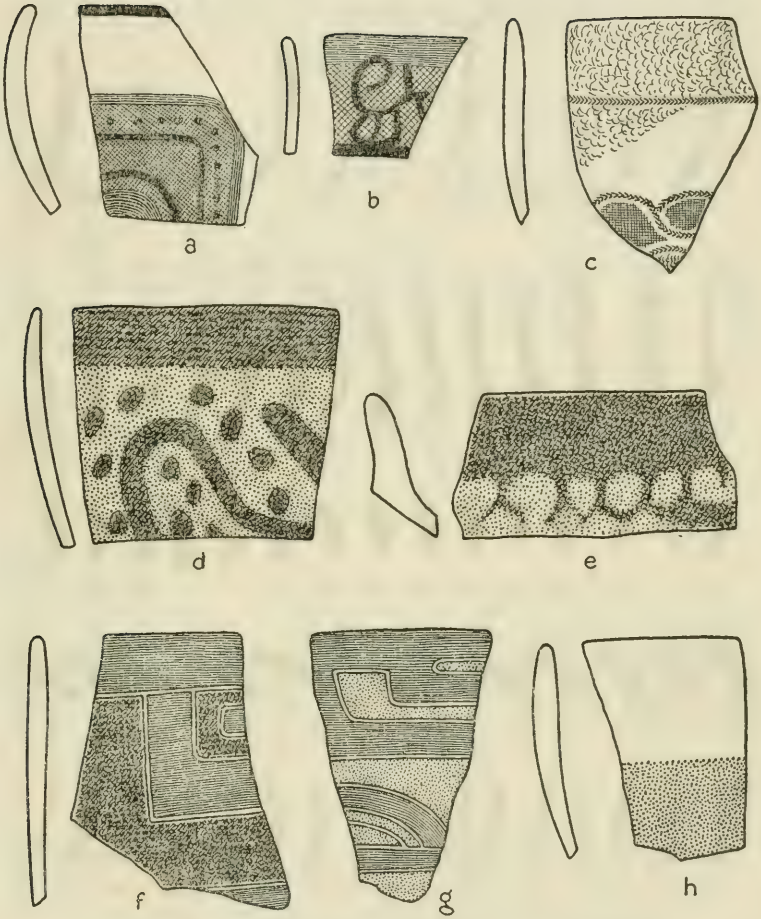

FIGURE 31.—Sherds with painted decoration on outer surfaces.

FORMS AND SIZES OF VESSELS

The principal vessel forms represented in the general Ranchito collection may be inferred from the cross sections of rim sherds shown in figures 32, 33, and 34. Care has been taken, especially in the case of incurved bowls (fig. 32, Nos. 26–52), to show all sherds at the angle they would assume in the complete vessel, the position being inferred

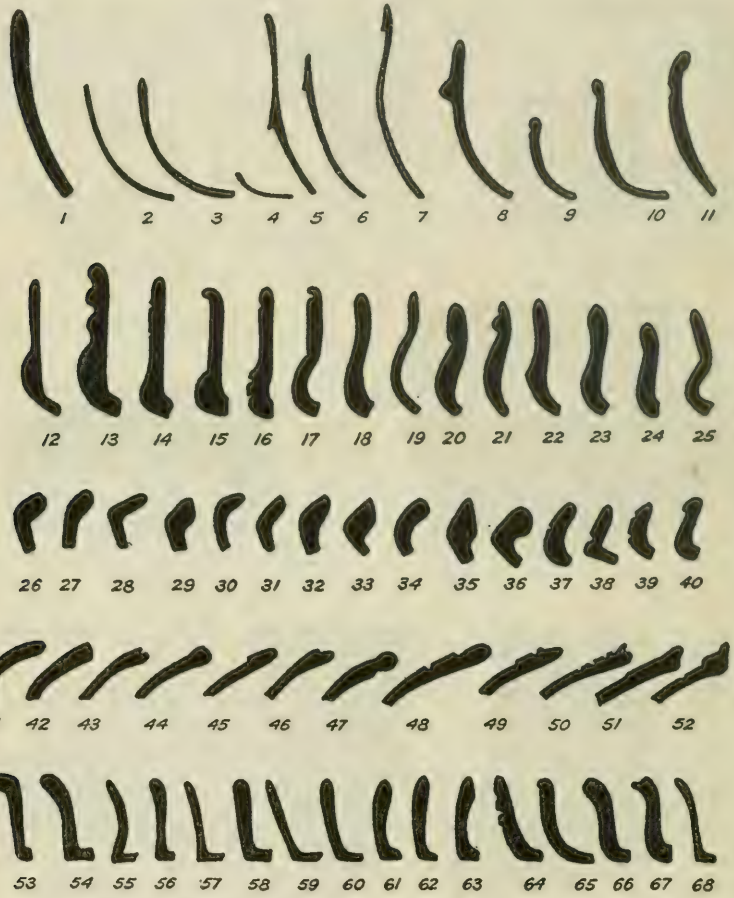

FIGURE 32.—Rim sherds, general Ranchito collection.

by observing the plane made by the boundary of the orifice of the vessel.

One is at once struck by the diversity and the elaboration of form. Whatever may have been the heritage of the ancient potters of Tres Zapotes in these respects, they obviously made the most of it, improvising innumerable variations of and innovations upon the half dozen or so primary forms with which they might have started, and while

certain dominant forms constantly recur, standardization does not appear ever to have become so rigid as to hamper greatly the originality of the potter. Minor deviation from the norm, rather than strict uniformity, is the rule.

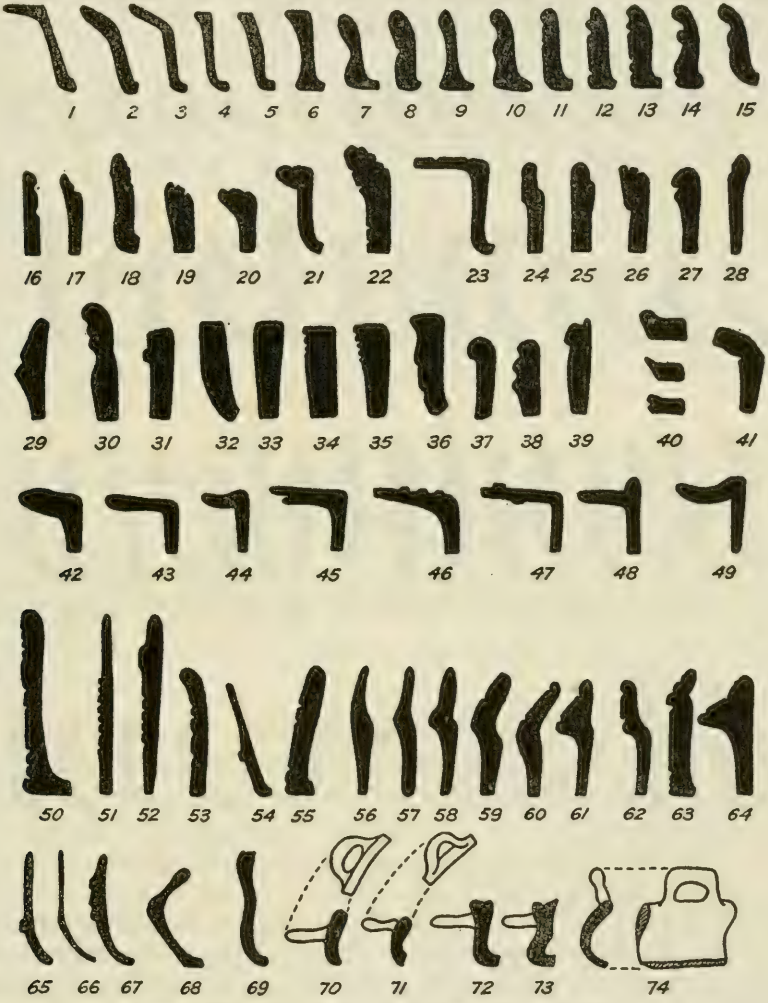

FIGURE 33.—Rim sherds, general Ranchito collection.

Precise comparison with the forms of other areas is rarely possible. It may be noted, however, that the following shapes occur in Periods IB and II at Uaxactun: Figure 32, Nos. 8, 11, 37, 39, 53, 54, 57, 58, and 68; figure 33, Nos. 4, 6, and 7 (Ricketson, 1937). Again, figure 32, Nos. 8, 22, 24, 27, 30, 54, and 56; and figure 33, Nos. 14, 44, and 64 are duplicated in Period I at San José, British Honduras; figure 32, No. 5,

when provided with a ring base, is the dominant bowl form of San José II; and figure 33, No. 51, occurs in San José IV (Thompson, 1939). Moreover, it can hardly be pure coincidence that figure 32, No. 8, which occurs at all three sites, should be decorated, in each case, with diamond-shaped depressions along the edge of the flange. Nos. 50 and 51 of figure 33 are frequent forms at El Tajín.[6]

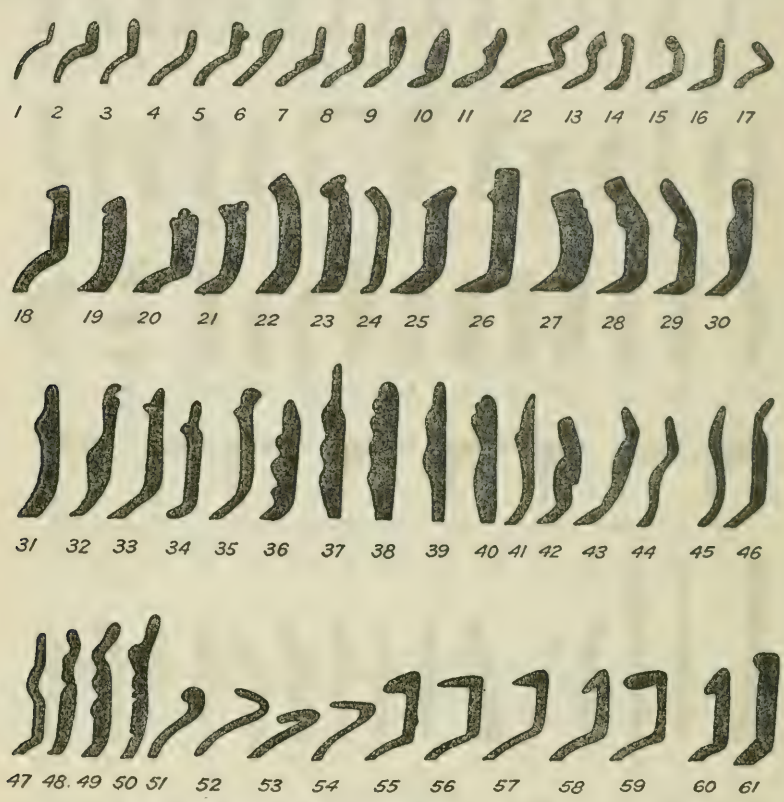

FIGURE 34.—Rim sherds from necks, general Ranchito collection.

The following table gives the most usual size or the size range corresponding to the commoner forms shown in figures 32, 33, and 34. Height is given only when sherds sufficiently complete are available to make this measurement. Heights for figure 34 refer to the neck alone, not the complete vessel. Thicknesses in italics express the range within a single vessel.

[6] Du Solier, W., personal communication.

TABLE 1.—*Forms and sizes of vessels, general Ranchito collection*

Rim sherds	Diameter of orifice	Thickness	Height	Rim sherds	Diameter of orifice	Thickness	Height
Fig. 32, Nos.:	*Cm.*	*Mm.*	*Cm.*	Fig. 33, Nos.:	*Cm.*	*Mm.*	*Cm.*
1	15 -24	4 - 9	5 - 8	50, 55	7 -28	2 -13	
2, 3	14 -20	2½- 8	4.5- 9	56	8	*2 - 8*	
4	10 -17	2	1.2- 4.2	60		6 - 8	11
5, 7	16	*1½- 2½*	15	66, 67	13 -18	*1½- 5*	5 - 6.3
6	11 -13	2½- 4	7	70-74	54 -56	5 -10	6 - 6.5
8	8 -19	3 -12		Fig. 34, Nos.:			
9, 10	8 -16	3 - 4	7	1	4 -22	2½-22	.5- 3.5
11	8 -17	3 -12		2, 4	29	22	3
12-17	10 -18	*3 -10*	5 - 8.5	6	56	27 -57	4.5- 6.5
18-24	8 -21	3 -12	3.5- 6.2	11, 12, 47-50	8 -21	4 -10	3.5- 7
25	3.5- 7	1 - 5	3 - 3.2	13	8.5-44	6 - 9	2 - 3.5
26-40	4.5-50	2 -18	2.5-30	14	4 -26	5 - 8	2.5- 3.5
41-52	8 -27	3 -12	5.8-15.5	16	35		1.8
53-68	7 -46	3 -12	2.4-14	17	16 -23	3 - 6	1 - 7.5
Fig. 33, Nos.:				22	10	6	2.8
1-15	7 -32	3 -13	2 - 8.5	24	39 -19	4 -10	2.7- 9
16-19		5 - 8		25	33	11	4.5
22		18		26	28	22	9.7
20, 38	42	9 -12		35	33	7	
31, 34, 35		13		41	19		
32		5 -16		46	20	4	
33		6 -12		51	14	8	1.2
37	42	3 - 9	2.2-10	53, 54	25 -28		
40	7 - 8.2	7 -12	1.4- 2.6	59	21	3 - 4	7
42-49	36 -60	4 - 7	2 - 6.7				

It is worthy of note that among the neck forms are some which attain the astonishing thickness of 57 mm. We have already called attention to the association of such necks with the huge ollas of the deep burials at the Ranchito site (Middle Tres Zapotes B). Such vessels may have been used, also, as storage vessels. On many of the necks, especially those of the general form seen in figure 34, No. 30, a crude effigy has been molded. (See pl. 56 and accompanying discussion.)

FORMS OF SUPPORT

Figures 35 and 36 show the characteristic forms of support encountered in the general Ranchito collection. Lack of complete vessels renders it impossible to state in all cases the form of vessel from which a particular form of support is derived. In many cases, however, the association is readily established. Slab-feet (fig. 35, *d*, *e*, *f*) commonly belong to flat-bottomed dishes with slightly flaring sides (often with everted rim) like those shown in figure 21, *b*, *c*, *d*. Such vessels are predominantly black, dark brown, or gray and almost always carry incised decoration, frequently in the form of panels. The flat form of slab (fig. 35, *e*) is solid and may support a plain, black, cylindrical vessel. It is far less common than the wedge-shaped slab, which is hollow. The latter is, more often than not, provided with one or more openings. These may be triangular, as in

figure 35, *d*, or they may take the form of parallel slits which taper slightly from above downward. Very similar supports occur in Periods II and III at Uaxactun (Ricketson, 1937) and Period II at San José, British Honduras (Thompson, 1939).

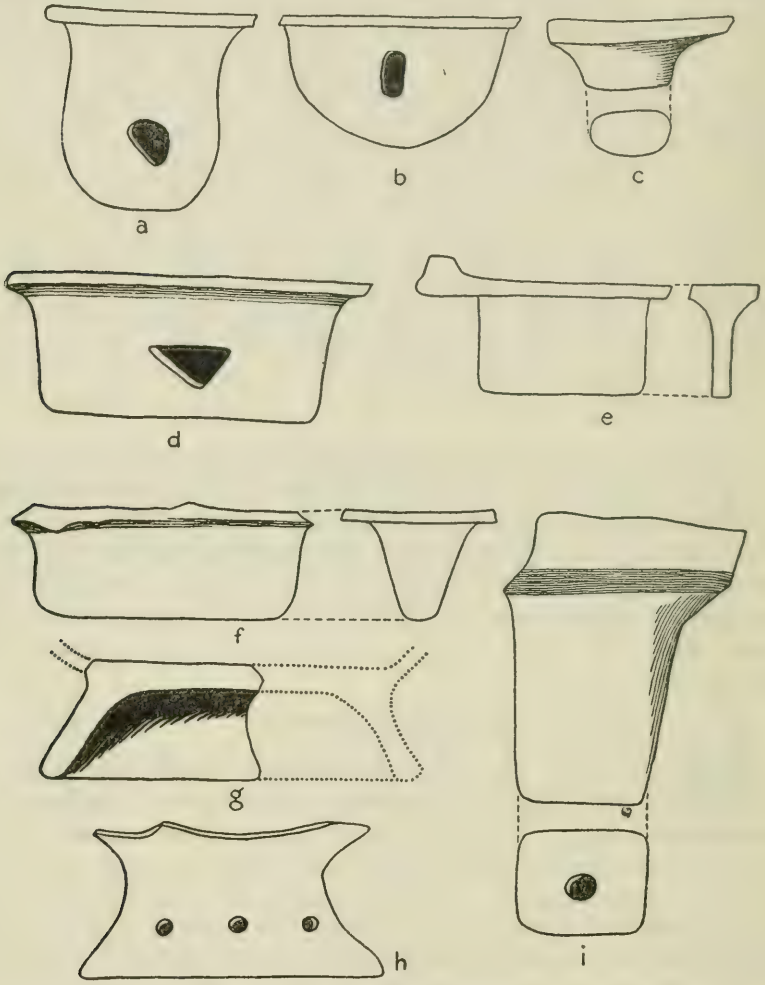

FIGURE 35.—Forms of support, general Ranchito collection.

Cylindrical supports having a slit in the bottom occur in sizes of the order of figure 35, *i*, a quadrangular variant.

Annular bases similar to those seen in figure 35, *g* and *h*, and more rarely ring bases, occur in connection with Rust Red, rough ware bowls. They range in depth from 1.2 to 4.5 cm. and in diameter from 6 to 15 cm.

Forms of the type shown in figure 36, *a*, *b*, *c*, and *d* tend to be associated with simple silhouette, round-bottomed bowls, especially very thin vessels of Gray ware, but this association is not exclusive. (See, for example, fig. 24, *c*.)

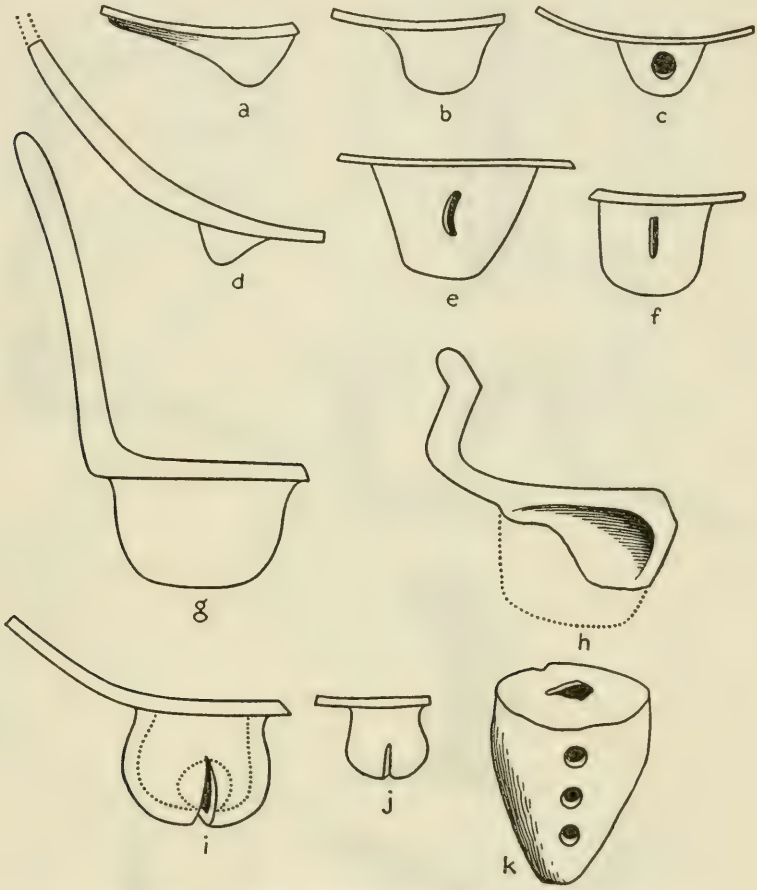

FIGURE 36.—Forms of support, general Ranchito collection.

Forms *e* and *f*, figure 36, are especially abundant among sherds of Gray, Pink and Yellow, and White-slipped wares; they tend to go with low flat-bottomed dishes having outcurved sides.

Form *g* is commonest in connection with heavy Rough ware vessels of the shape indicated that have been polished and slipped on the inside (rust red, reddish brown, and orange predominating), while *h* is characteristically gray or black.

Forms *i* and *j* are by far the most usual at Tres Zapotes. They occur in large numbers among sherds of Gray, Pink and Yellow, and White-slipped wares, where they are even more numerous than *e* and *f*. For an example of a complete vessel, see figure 24, *a*. An inter-

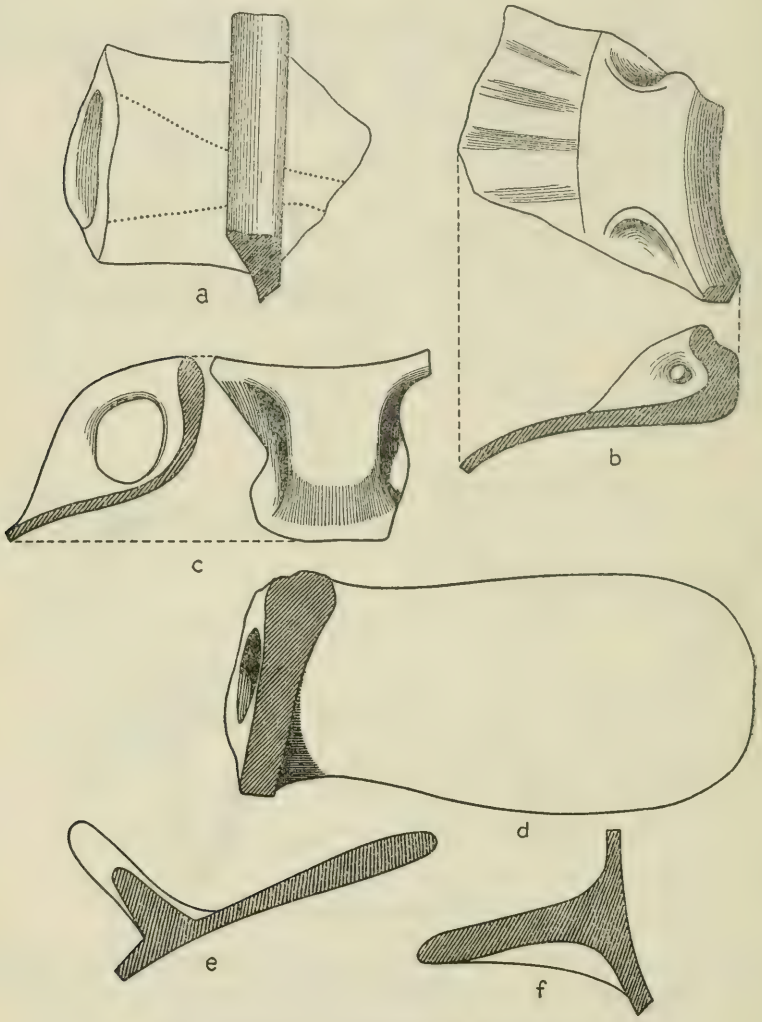

FIGURE 37.—Handles of vessels, general Ranchito collection.

esting example of the predominance of form over function is the groove in figure 36, *j*, which, while it imitates the cascabel form *i* in appearance, is actually solid, being too small in size to permit hollowing out and inclusion of the pellet. At Uaxactun cascabel supports

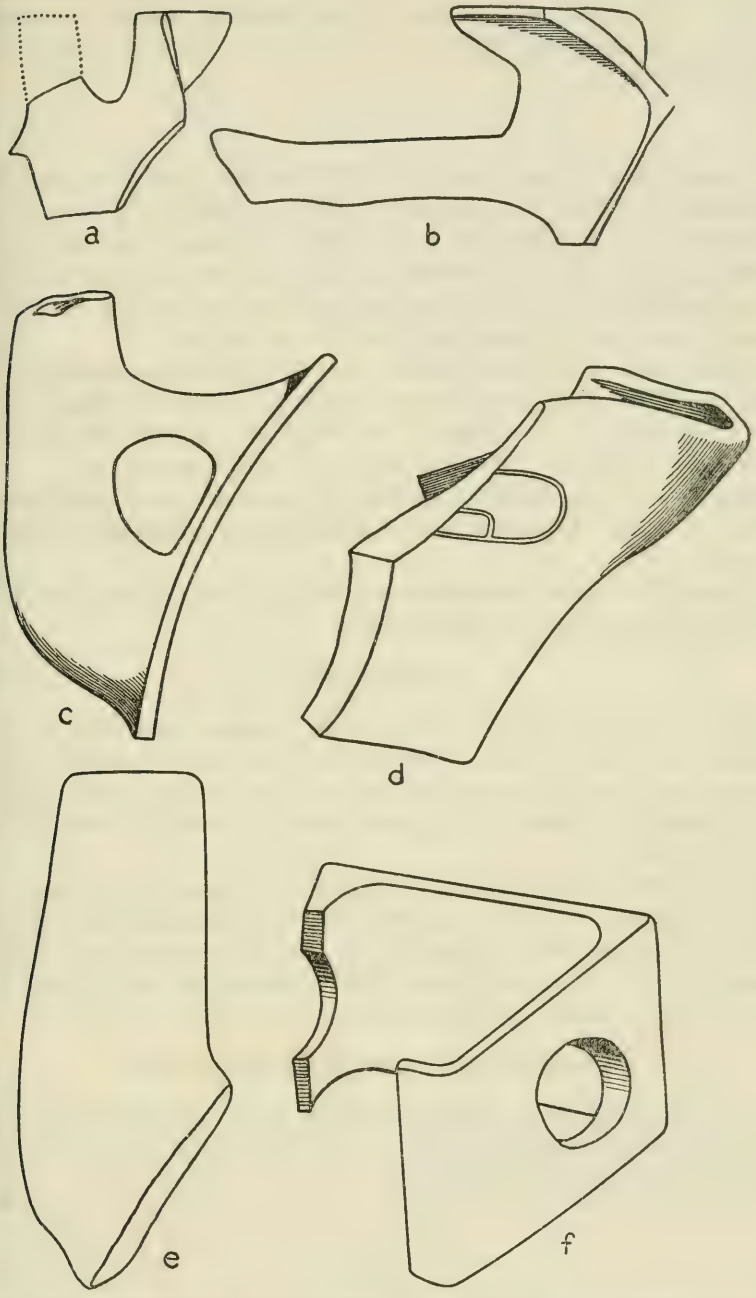

FIGURE 38.—Spouted forms and unidentified pottery object, general Ranchito collection.

occur in Period II, where they differ from those shown here in that they are not constricted and tend to be flattened on their bottoms.

Form *k* is aberrant. It is not possible to state with what type of vessel it served.

HANDLES

Vessels provided with handles or lugs appear to have been relatively infrequent. Those so equipped are, for the most part, heavy vessels of great size. In figure 33, Nos. 70–74, for example, we see the rim sherds of large traylike vessels of rough Yellow ware provided with loop-handles which stem from various levels along the side of the vessel; these may be horizontal, vertical, or inclined.

Somewhat similar vessels of the Rust Red, rough ware seem to have had handles of the sort shown in figure 37, *a* and *d*. Such handles are occasionally in the form of an effigy and may be placed on the inside of the vessel. (See pls. 54 and 55 and discussion.)

Large, incurved, Rough ware bowls frequently have shelf-handles 6 to 9 cm. long. Cross sections of such handles are given in figure 37, *e* and *f*.

Figure 37, *c*, is rather exceptional, while *b*, from a Rust Red, rough ware bowl, is unique in the collection.

SPOUTED VESSELS

Spout-handle vessels are exceedingly common, especially in Gray, White, and Black wares. The bridge from spout to neck of vessel may or may not be present, its presence or absence being unrelated to the size of the vessel. The general range of sizes is shown in figure 38, *a*, *b*, *c*, and *e*.

True spouts like the spout of a pitcher are exceedingly rare. One of the very few examples excavated is the incised specimen of Rust Red, rough ware seen in figure 38, *d*. In this connection it is interesting to recall that at Monte Albán pitchers do not appear until Period V, the period of Mixtec domination.

DISTRIBUTION OF FORMS ACCORDING TO WARE

The following table indicates with which wares the forms shown in figures 32, 33, and 34 are associated. Numerals at the heads of columns refer to wares as listed on page 56.

TABLE 2.—*Distribution of forms according to wares*

Rim sherds	Wares [1]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Fig. 32, Nos.:																
1–4	×	×	×	×	×	×	×	----	×	×	×	×	×	×	×	×
5–8	----	----	×	×	×	×	×	----	×	×	----	----	×	----	----	----
9–11	----	----	×	----	×	×	×	----	----	----	----	----	----	----	----	----
12–17	----	----	×	----	×	----	----	----	×	×	----	----	----	----	----	----
18–24	×	----	----	----	×	×	×	×	×	×	----	----	----	----	----	×
25	----	----	----	----	----	----	×	----	----	----	----	----	----	----	----	----
26–36	----	×	×	----	×	×	×	----	----	----	----	----	----	----	----	----
37–40	----	×	×	----	----	×	×	----	×	×	----	----	×	----	×	----
41–43	----	----	----	×	×	×	×	----	----	----	----	----	----	----	----	----
44–52	----	----	----	----	×	×	×	×	----	×	----	----	----	----	----	----
53, 54	----	----	×	×	×	×	×	×	×	×	----	----	×	----	----	----
55–59	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
60–63	----	----	×	×	×	×	×	----	----	×	----	×	----	----	----	×
64	----	----	×	×	×	×	×	×	×	×	×	----	×	----	----	----
65	----	----	×	----	----	----	×	----	----	----	----	----	----	----	----	----
66	----	----	×	----	----	----	×	×	×	×	×	×	×	----	----	×
67	----	----	----	----	----	----	----	----	×	----	----	----	----	----	----	----
68	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Fig. 33, Nos.:																
1, 4–6	----	----	×	×	----	×	×	----	×	×	----	×	×	----	----	----
2, 3	----	----	×	×	----	×	×	×	×	×	×	----	----	----	×	×
7–15	----	----	×	×	×	×	×	----	×	×	×	----	----	----	----	×
16–22	×	----	×	----	×	----	×	×	×	×	----	----	----	----	----	----
23	----	----	----	×	----	----	----	----	----	----	----	----	----	----	----	----
25	×	----	×	----	×	----	×	×	×	×	----	----	----	----	----	----
26	----	----	----	----	×	----	----	----	----	----	----	----	----	----	----	----
27	----	----	----	----	----	----	----	----	×	----	----	----	----	----	----	----
28–30	----	----	----	×	----	----	×	----	----	×	----	----	----	----	----	----
31–38	----	----	×	×	----	×	×	----	×	----	----	----	----	----	----	----
39	×	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
40	----	×	×	×	----	×	----	----	×	----	----	----	----	----	----	----
41	----	----	----	----	×	----	----	----	----	----	----	----	----	----	----	----
42–49	----	----	×	----	×	----	×	----	----	----	----	----	----	----	----	----
50–55	×	----	×	×	----	×	×	×	×	×	×	----	×	----	×	----
56–64	----	----	×	×	×	×	×	×	×	×	×	----	×	----	----	----
65	----	×	×	----	----	×	×	----	----	----	----	----	----	----	----	----
66	----	×	----	----	----	×	----	----	----	×	----	----	×	----	----	×
67	----	×	×	----	----	----	----	----	----	----	----	----	----	----	----	----
68–74	----	----	----	----	×	----	----	----	----	----	----	----	----	----	----	----
Fig. 34, Nos.:																
1–11	----	----	×	----	×	×	×	×	×	×	----	----	×	----	----	----
12, 13	----	----	----	----	----	×	----	----	×	×	----	----	----	----	----	----
15–17	----	----	×	----	×	×	×	×	×	×	----	----	×	----	----	----
18, 21–29	----	----	----	----	×	×	----	----	----	----	----	----	----	----	×	----
19	----	----	----	----	----	×	----	----	×	----	----	----	----	----	----	----
20	----	----	----	----	----	----	×	----	----	----	----	----	----	----	----	----
30	----	----	----	----	----	×	×	----	----	----	----	----	----	----	----	----
31, 32	----	----	----	----	×	×	×	----	×	×	×	----	×	----	----	----
33–50	----	----	----	----	×	----	×	----	----	×	----	×	×	----	×	----
51–54	----	----	×	----	×	×	×	×	×	×	----	----	×	----	----	----
55–60	----	----	----	----	----	×	----	----	×	----	----	×	----	----	----	----
61	----	----	----	----	----	----	×	----	----	----	----	----	----	----	----	----

[1] For wares indicated by numerals, see p. 56.

DECORATIVE TECHNIQUES OTHER THAN PAINTING

Fine incision.—A type of decoration found principally on Black ware, but also occasionally on White-slipped, Rust Red, Smooth, and other wares consists of very fine lines cut through the slip. The design is crudely executed. Use is made especially of parallel lines, crescents, zigzags, and cross-hatching. Perfect symmetry hardly exists, and lines conceptually parallel never are so in fact.

Figure 40, *g–l*, are examples of this decoration at its best. The design here occurs on the rims of flat-bottomed dishes (Polished Black ware), having nearly straight and slightly flaring sides. The

incisions contain red pigment, resembling in this respect, as well as in their pattern, a form of decoration common to Monte Albán I.

Figure 41, *a*, *c*, *e*, and *f* illustrate the use of the same technique of

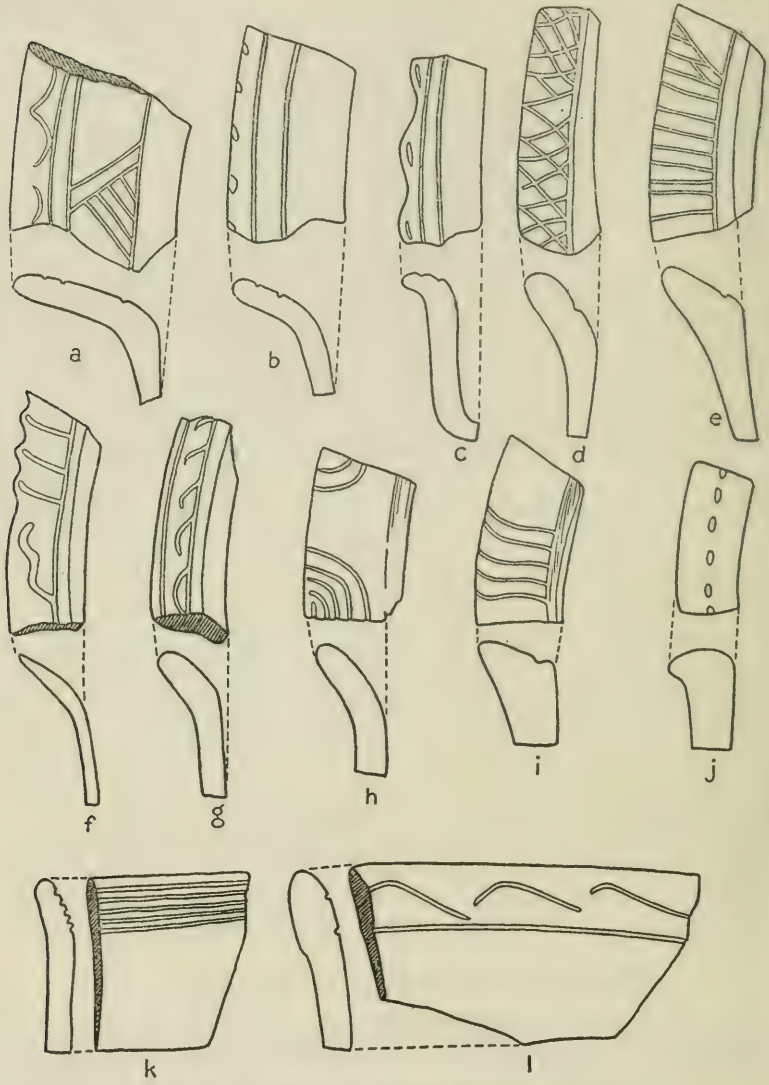

FIGURE 39.—Incised rims, general Ranchito collection.

decoration on very wide everted rims. Such rims are highly reminiscent of the rims occurring in material from the early periods of Uaxactun (Ricketson, 1937), Playa de los Muertos (Strong, Kid-

der, and Paul, 1938, pl. 10, *c*, *g*, *h*, *i*), San José, British Honduras (Thompson, 1939), Copán,[7] and Monte Albán.[8]

In figure 43, *b*, we have one of the rare examples in which this type of incision decorates practically the entire wall of the vessel.

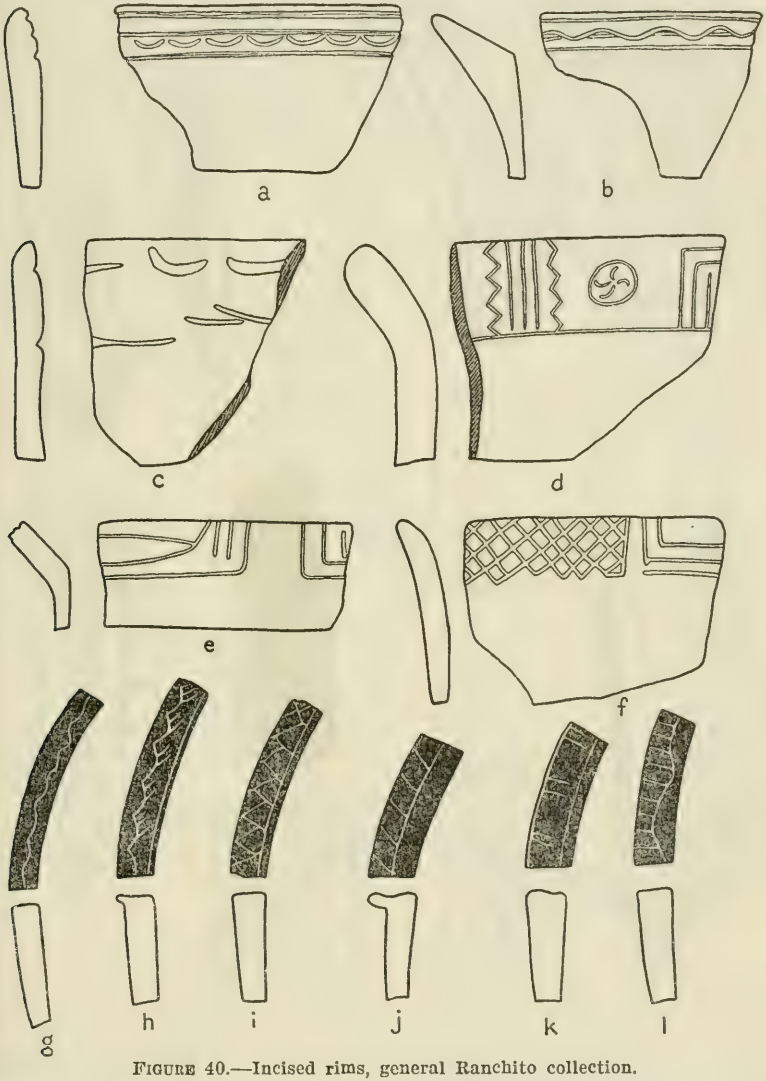

FIGURE 40.—Incised rims, general Ranchito collection.

Broad, shallow incision.—This type of decoration differs from the preceding only in that it appears to have been executed with an

[7] Collection from Mound 36, Copán, Peabody Museum, Harvard University.

[8] Monte Albán collections, Museo Nacional de Historia, Arqueologia, y Etnografia, Mexico, D. F.

implement less sharp, with the result that the lines produced are broader, although still barely deep enough to cut the slip. Numerous examples, among them several rims of the early type noted in connection with fine incision, are illustrated in the figures 39, *a*, *d–i*, *l;*

FIGURE 41.—Incised rims, general Ranchito collection.

40, *a*, *b*, *d*, *e*, *f;* 41, *h;* 42, *c*, *d;* 43, *a*, *c*, *d*, *e;* 44, *a*, *b*, *c;* 45, *f;* 46, *a–e;* 47, *a–d*, *g;* 48, *a*, *b*, *e*.

The design of figure 40, *d*, deserves special attention, inasmuch as Lothrop (1926, p. 182) has pointed out that vertical lines flanked by wavy lines constitute a very characteristic pattern on Maya pottery from Copán and the Ulua Valley.

Multiple scratching.—This is the "decoración raspada" of Monte Albán II, in which the pattern is formed by a series of very close, approximately parallel scratches. It occurs only on Polished Black pottery, and the incisions are painted red. So characteristic is this decoration of Monte Albán II and yet so plentiful is it at Tres Zapotes that cultural contact between the two sites on an early time level seems

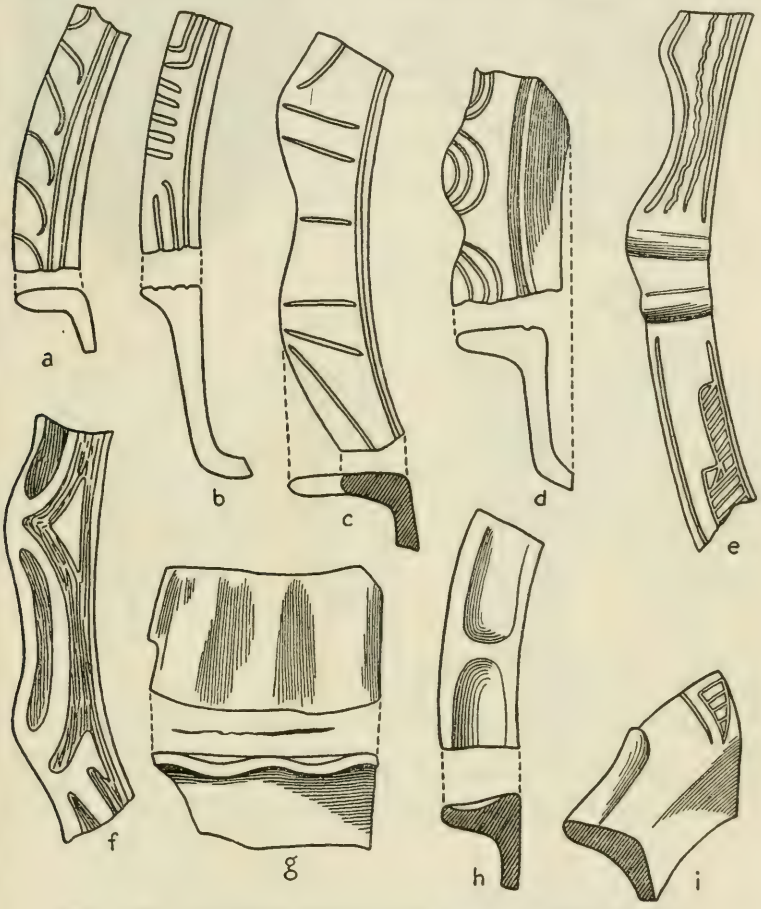

FIGURE 42.—Incised and modeled rims, general Ranchito collection.

an inescapable conclusion. (For illustrations see figs. 41, *d*, *i;* 44, *d;* 45, *e;* 46, *f;* 47, *e*, *f*.)

Deep incision.—This is the technique most characteristic of Monte Albán III. The incising precedes application of the slip. Geometric designs cut up the surface of the vessel into sharply outlined blocks which contrast strongly with the cruder patterns of the shallow incisions. Most examples of this form of decoration are to be found among the polished Black, Dark Brown, and Gray wares. (For illustrations see figs. 45, *b*, *c*, *d;* 48, *g*.)

Indented, grooved, and fluted decoration.—Thumbnail indentations, as well as indentations, grooves, and fluted effects produced by the use of a blunt implement, are also common. Their use is not restricted to any particular wares, although Polished Black ware furnishes most

FIGURE 43.—Incised sherds, general Ranchito collection.

of the examples. (For illustrations see figs. 39, *b*, *c*, *j*; 40, *c*; 41, *b*, *g*; 42, *h*; 43, *f*, *g*; 45, *a*; 47, *h*; 48, *d*, *f*.)

There is a close parallel, as far as one may judge from the published report, between figure 48, *d*, and the fluted ware of San José, British Honduras (Thompson, 1939).

Modeling and filleting.—Decorative effects achieved by these techniques, except for the scallops seen in many of the everted rims, are comparatively rare. Figure 42, *g*, furnishes an example of modeling; figure 42, *i*, of filleting combined with shallow incision.

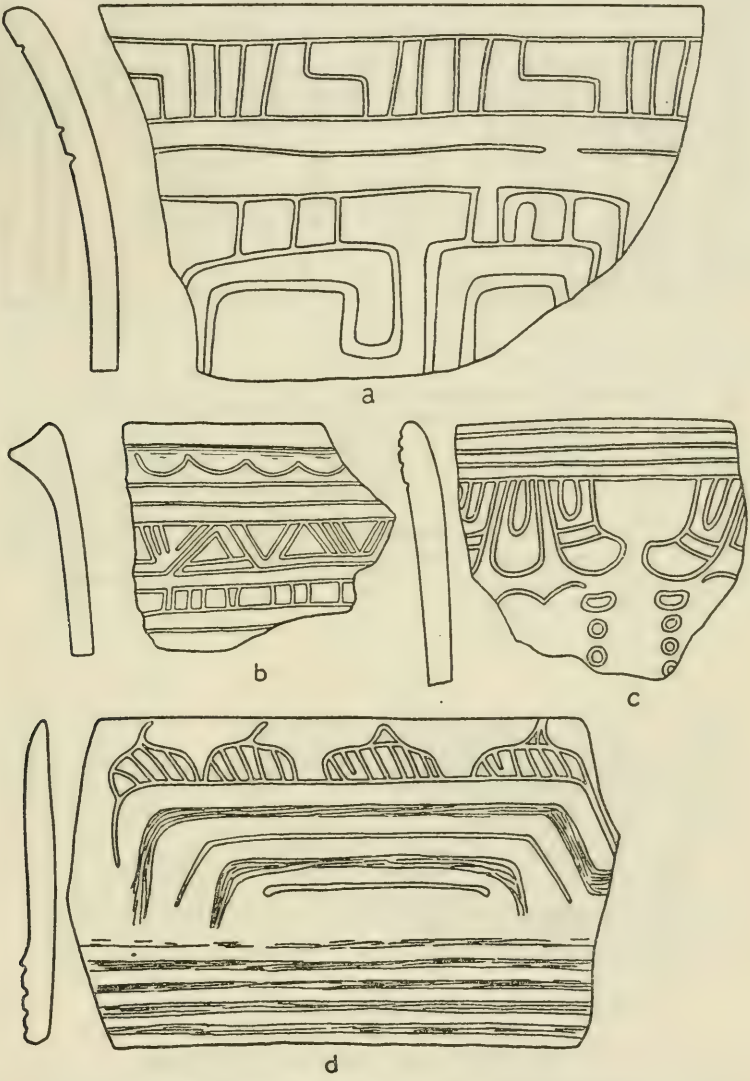

FIGURE 44.—Incised sherds, general Ranchito collection.

Combined techniques.—Examples of specimens in which two or more of the decorative techniques described occur together are rare. Figure 42, *i*, has just been cited. Figure 42, *e*, is a case of deep incision combined with modeling. Figure 48, *c*, combines multiple scratching, seen

at the left, with broad shallow incision (center and right sections) and indentations along the base. This particular specimen is of singular interest because the design may well have been suggested by a piece of architecture. Compare with the west wall of the Stone Platform (map 10).

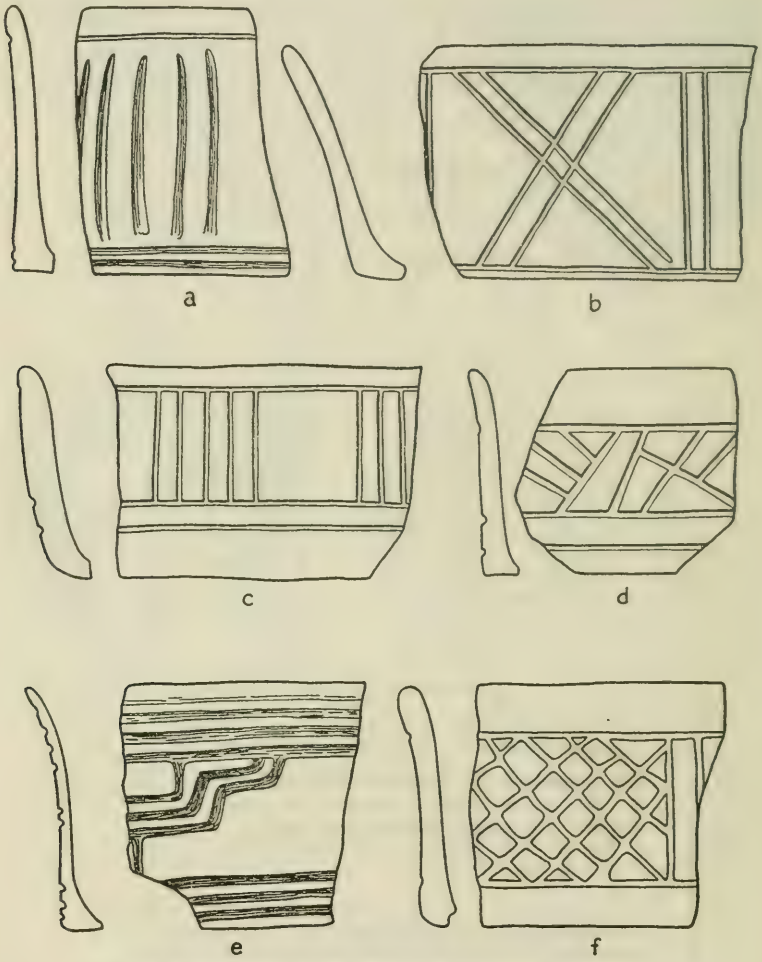

FIGURE 45.—Incised sherds, general Ranchito collection.

MISCELLANEOUS AND ABERRANT SPECIMENS

To these categories belong the specimens shown in figure 49, as well as the object seen in figure 38, *f*.

Not unusual are sherds *g* and *i*, figure 49. The former is fairly typical of the thick-walled miniature vessels already noted in connection with surface burials. The latter is one of many perforated disks

found which might have served as spindle whorls. Disks of about the same size occur, also, without perforation. The other specimens are aberrant.

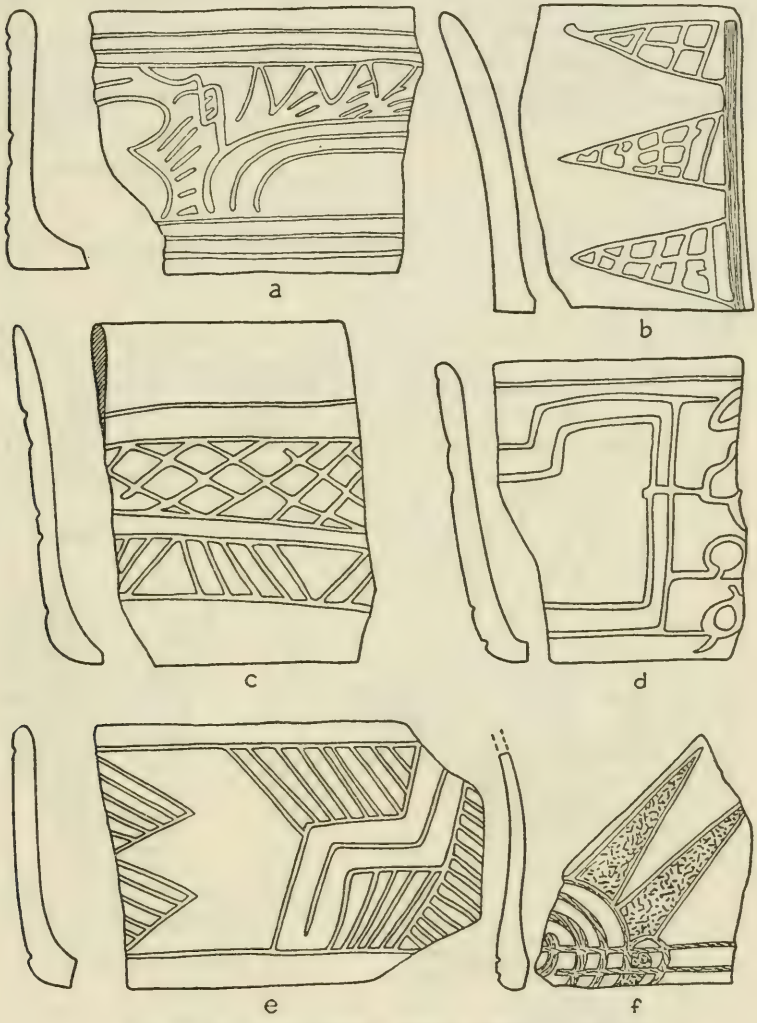

FIGURE 46.—Incised sherds, general Ranchito collection.

Except for some of the bowls with loop-handle supports which covered surface burials, *a* is about the only example of hobnail decoration encountered.

The single boss of *b* and the toothlike protuberance of *e* make these two specimens unique.

The odd shapes of *c* and *d* and the carefully planed and finished extremity of *d* make the source and function of these objects a question.

Of very special interest is *f*, a fragment of incensario of the frying-pan type, the only such fragment in the entire collection. It will be

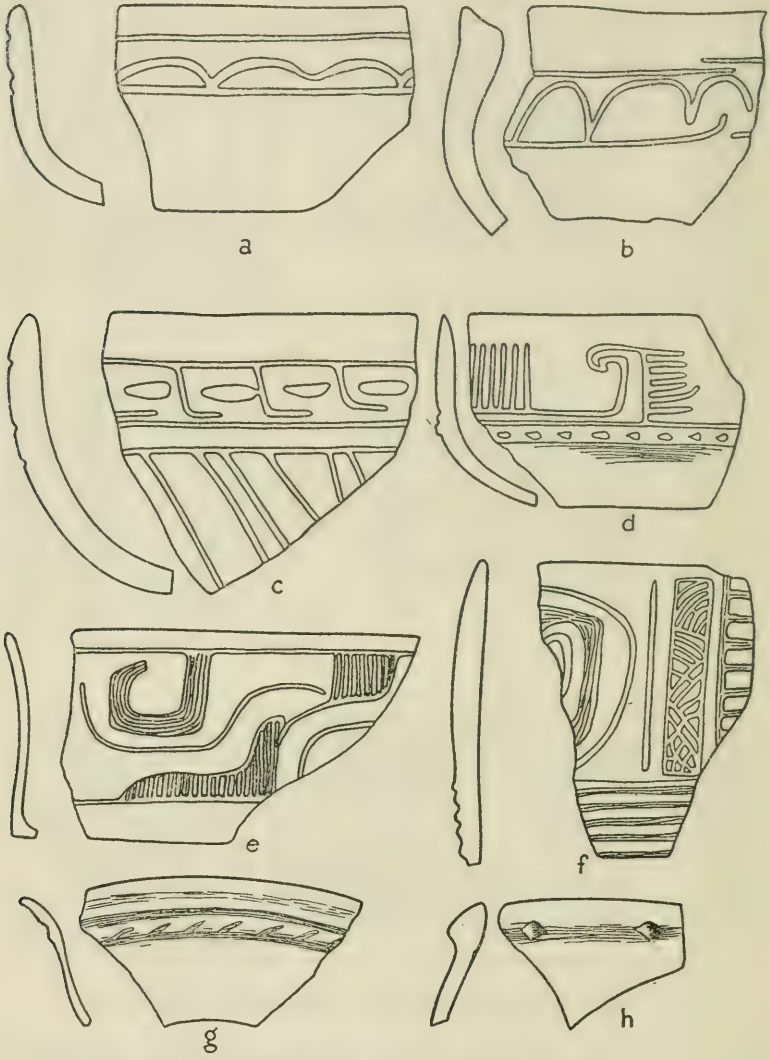

FIGURE 47.—Incised sherds, general Ranchito collection.

recalled that incensarios of this type are rare at Monte Albán before the fourth and fifth periods. The specimen shown here is dull black in color and has a surface which is not very smooth.

By far the most extraordinary specimens of the lot are figure 49, *h*, and figure 38, *f*, both made of pink clay and slipped with white. In

the former, which is represented both as seen from above and in profile, unshaded edges are unbroken. In the latter, only those edges at the

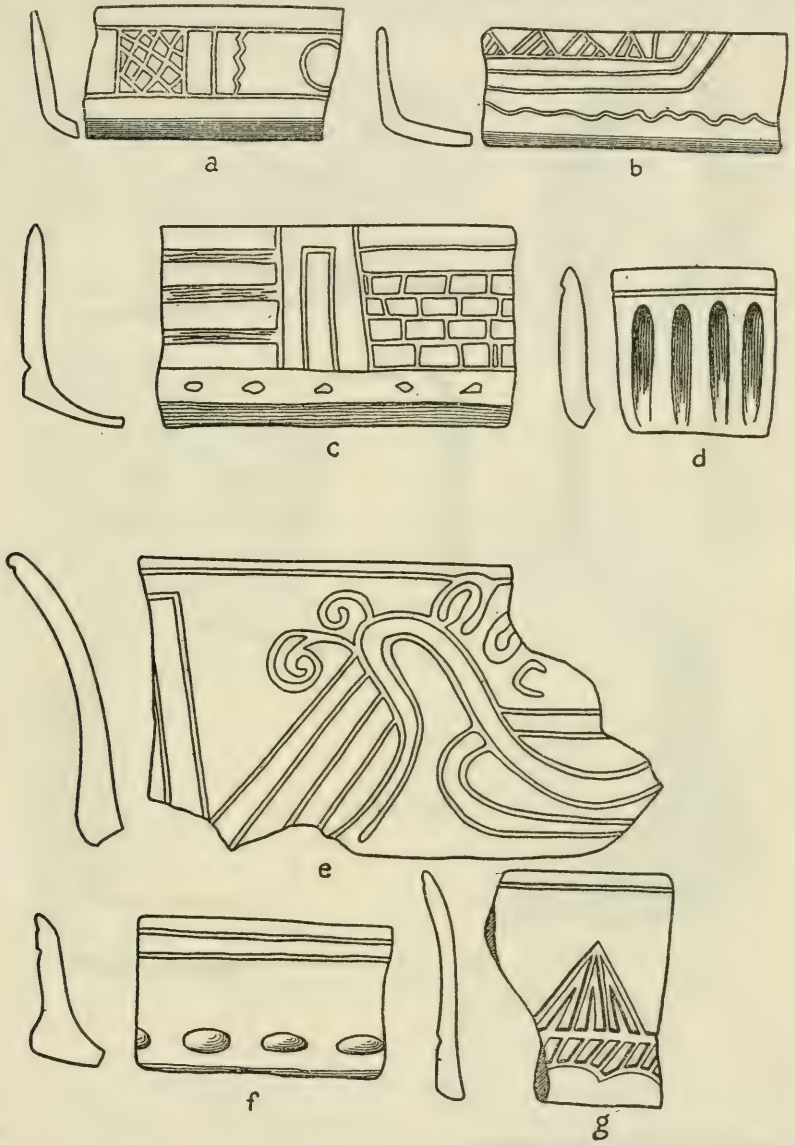

FIGURE 48.—Incised sherds, general Ranchito collection.

left which face the observer are broken. The two objects are equally mysterious as regards their possible use.

Figure 49, *j*, is an elongated clay pellet of uncertain function.

SPECIMENS OF SPECIAL VALUE FOR COMPARATIVE PURPOSES

A small group of these is shown in figure 50. All are specimens which point rather definitely either to a period or to a geographic area.

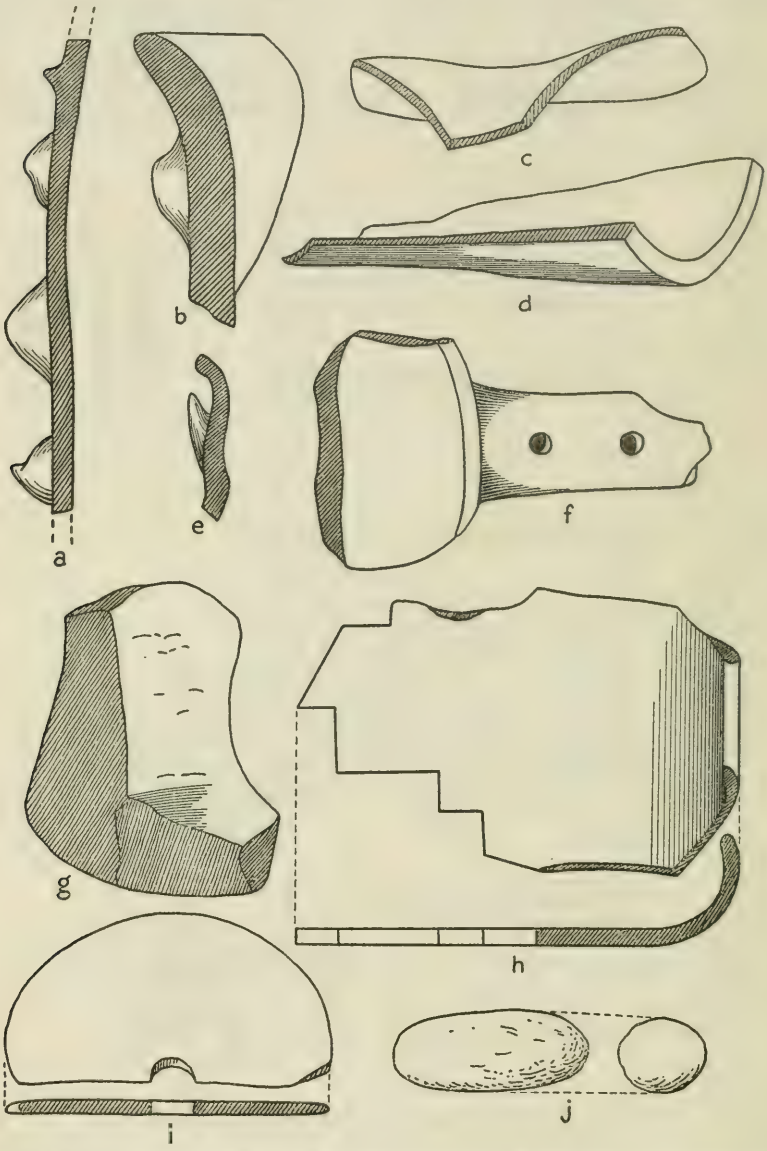

FIGURE 49.—Miscellaneous sherds and pottery objects, general Ranchito collection.

The sherd *a* strongly resembles both in form and decoration pottery which Thompson (1939) considers diagnostic of San José I.

The foot form *b*, of which two specimens only were obtained (and these apparently from the same vessel), is reminiscent of Holmul I, Monte Albán II, and other early Middle American horizons. Nevertheless, the specimens in question did not come from any great depth

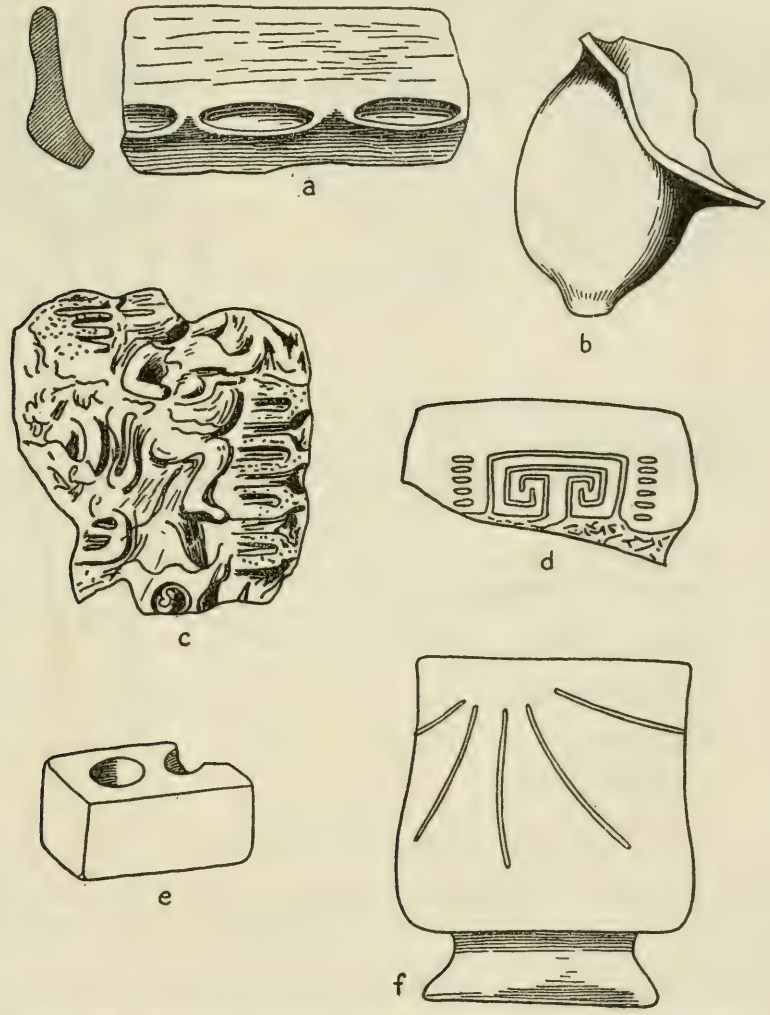

FIGURE 50.—Specimens suggesting alien influence, general Ranchito collection.

(approximately a meter), and they are of the Orange ware that is well represented among surface burial vessels but not found at all among deep burial vessels. We are thus forced to regard them as neoarchaic survivals. Gamio (1926–27, p. 216) found such foot forms in the neoarchaic material excavated at Salcajá, Guatemala.

It is of interest to note, in this connection, that the sherd *d* bears an incised design identical with one figured by Lothrop (1933) from Salcajá.

The fragment *c* is part of a cylindrical seal made of the same red clay as the "archaic" Tres Zapotes figurines (pls. 1–15). What makes the specimen remarkable is the human figure in relief done in the style known as that of Los Danzantes, the famous sculptured slabs which Dr. Caso (1935) has shown to belong to the earliest period of Monte Albán.

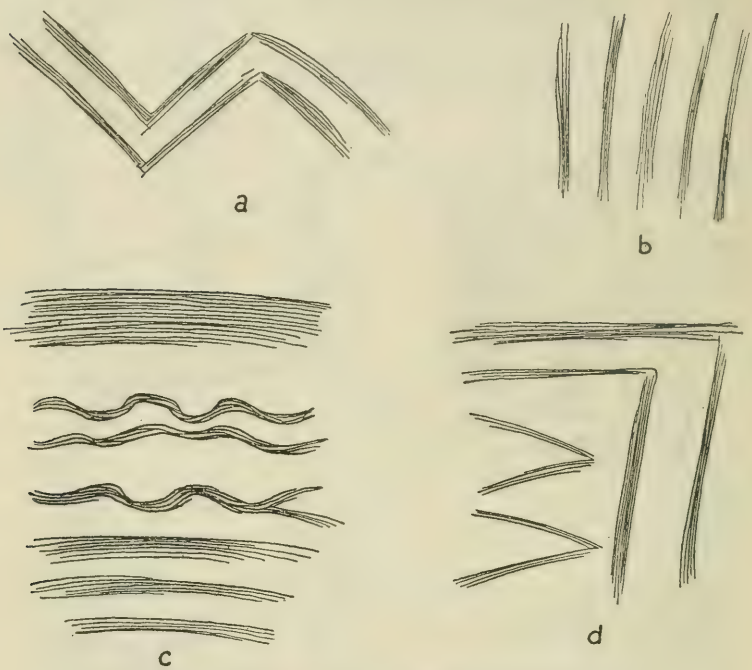

FIGURE 51.—Typical designs from "Stick-polished" pottery.

Of the same clay is the object designated *e*, the so-called candelero of Teotihuacán archeology; hence a link with the Valley of Mexico in classic Toltec times.

The pear-shaped vessel with annular base, *f*, is a form known to have been popular on the Mexican highlands, along the coast, and as far south as Costa Rica and Nicaragua. Its time range extends from Toltec well into Aztec times; at Copán it occurs during the period of reoccupation after the end of the Old Empire (Vaillant, 1927). This specimen has a white body and a brown base, a color combination which lends plausibility to the conjecture that it is of Totonac origin, or at least, Totonac inspiration (Spinden, E., 1933).

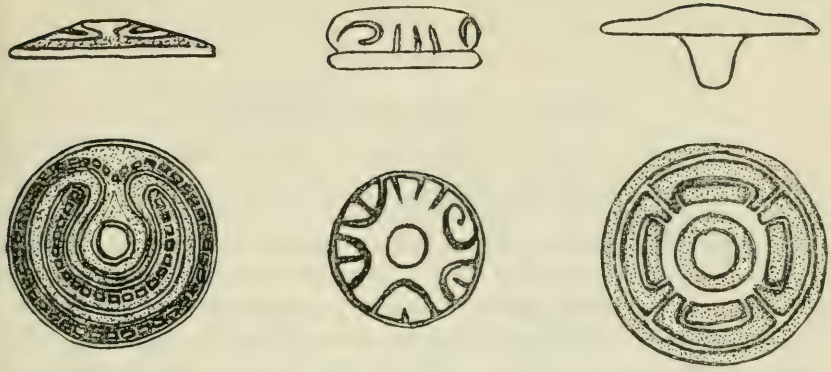

FIGURE 52.—Incised spindle whorls and mold.

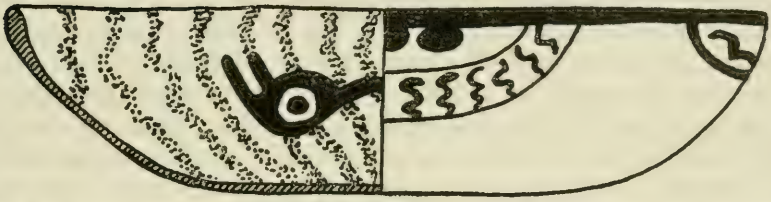

FIGURE 53.—Orange and Brown-on-Buff dish from Upper Tres Zapotes level suggesting Mixtec influence.

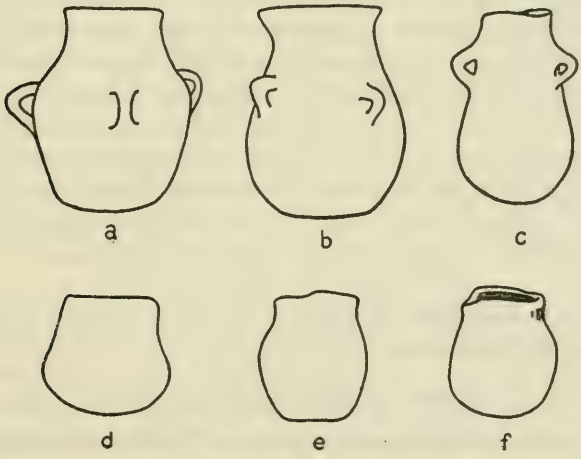

FIGURE 54.—Miniature vessels.

501626—43——7

PART 2. THE FIGURINES

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE

CLASSIC POINTED-CHIN TYPE (PLS. 1, 2)

The figurines shown in plates 1 and 2 are characteristically small with long pointed chins that tend to give the face a roughly triangular shape. They wear turbanlike headdresses subject to great individual variation. Modifications have been effected by filleting. The eyes consist of deep circular perforations to represent the iris and triangular perforations at either side, typically with a downward slant so that the eyes have the shape of an inverted V. The glance may be directed slightly upward, straight ahead, or slightly to one side. The nose is fairly long and narrow and the nostrils are indicated by circular perforations. The lips protrude slightly, are narrow and somewhat parted. There is a circular perforation at the corners of the mouth. Typically the lower part of the face is prognathous. In a few cases the ears are not shown. When present they have from one to three transverse incisions. In other cases the ears are indicated only by small circular earplugs. The back of the head is rather flat and sometimes slightly concave. The general effect created by these figurines is that of a mischievous child.

Some of the specimens shown in plate 2 deviate slightly from the norm for the group. In those of the first two rows, the triangular perforations for the eyes appear to have been made with an especially blunt implement. Moreover, they are, to an abnormal degree, detached from the central perforation, and their corners are rounded to such an extent that they become virtually oval in form. This feature, when combined with a certain fullness of the cheeks, has a softening effect that contrasts somewhat with the piercing quality of the typical expression. Figure 12 presents the unusual feature of a furrowed right cheek, while figures 16 and 17 have furrows above the eyes and lack perforations for the nostrils. Marked strabismus is apparent in figure 15.

Some of the figurines of this group are of yellow clay, but the majority are of terra-cotta red.

CLASSIC PROGNATHOUS TYPE (PL. 3)

The specimens shown on plate 3 are in the same technique as those of plates 1 and 2. They differ from the latter in the following respects:

(1) They exhibit a greater degree of prognathism.

(2) Their greatest facial breadth occurs typically at the level of the mouth, rather than at the level of the tip of the nose.

(3) The chin is less pointed.

(4) The upper part of the head tends to be conspicuously narrower than the lower part.

Marked development of the jaws is perhaps the outstanding feature. It may be noted that in those specimens which include the upper part of the torso the neck is extremely short and thick. No ornaments are worn about the neck.

Figure 16 strongly suggests goiter and most of the other specimens of the group give the impression of some type of glandular dyscrasia. In at least one specimen (fig. 4) there is convergent strabismus. Whether or not this effect was intentional there is, of course, no way of knowing. Had the artists who made these figurines esteemed it as great a mark of beauty as did the Mayas of the fifteenth century, one might expect to find it appearing much more frequently than it actually occurs. It is, however, by no means uncommon. Considerable dexterity is shown in directing the gaze in any desired direction—upward, downward, sidewise, or even obliquely.

Figure 6 presents a type of earplug not previously noted, a solid disk rather than a ring.

CLASSIC RECTANGULAR-FACE TYPE (PLS. 4, 5)

This group shows close affinities with the type of plate 3. The prognathism is much less pronounced, however, and the faces are relatively longer. Some specimens exhibit a slight narrowing of the face at about the level of the eyes, with a widening of both forehead and jaws. The form of the chin is quite variable, but never sharply pointed. Ears and ear ornaments are subject to the same variations as those seen in the preceding plates. The long rectangular shape of the face is the salient feature.

The specimens shown in plate 4 may be considered the norm for this group, while most of those in plate 5 are variants. Note the bearded figure (pl. 5, fig. 19).

CLASSIC BEATIFIC TYPE (PLS. 6, 7)

The figurines of this group do not differ radically from those of plates 4 and 5. However, the features are less angular; the faces, generally speaking, are less elongated; and the cheeks tend to be puffed out. The most conspicuous characteristic is the marked upward gaze of the eyes, which combined with a slight upward and backward tilt of the head creates a sort of beatific or sanctified expression. Headdresses, when complete, exhibit, without exception, filleted appendages, usually suggesting buttons, placed on the middle of the forehead.

The torso, as seen in plate 7, figures 16 and 19, is nude and entirely without ornament. The figures are apparently female, but the breasts are not accentuated. The abdomen is full and rounded and, in figure 19, suggests pregnancy.

A TYPICAL TRANSITIONAL TYPE (PL. 8)

The specimens shown on plate 8 may be regarded as transitional (although probably not in a chronological sense) between those of plates 6 and 7 on the one hand and plates 10–12 on the other. The following comparisons, for example, will serve to illustrate this point:

Figure 8 with plate 6, figure 11, and with plate 11, figure 12.
Figure 9 with plate 6, figure 8, and with plate 12, figure 20.
Figure 14 with plate 6, figure 1; plate 7, figures 5 and 17; and then with plate 11, figures 10 and 18.

The faces, particularly in the first two rows, approximate the baby-face type. In some cases, the triangular perforations of the eyes are crudely made and not carefully placed in relation to the central circular perforation. For the most part, the uplifted gaze is supplanted by a horizontal or downward one. The nose is slighted, being indicated at times by little more than the openings for the nostrils. Likewise, the mouth may be hinted at only by the perforations at the corners. The cheeks are generally puffed out. Earplugs, when present, are more often directed forward than laterally.

It is perhaps worthy of note that nearly half the specimens of this group show strabismus.

The specimens of the last row merge readily into plate 10 type, from which they differ principally in that the hair is not shown draped over the ears. In this respect they resemble another transitional group, plate 9.

A TYPICAL TRANSITIONAL TYPE (PL. 9)

The specimens shown on plate 9 are more specifically transitional in style between plates 6 and 7 and plates 10–12 than those shown in plate 8. Headdresses of the pattern seen in plate 6, figure 4, and plate 7, figure 1, recur and undergo considerable elaboration, achieving quite bizarre effects in figures 8, 9, and 10. At first glance, the headdresses of 8 and 10 suggest animals, but careful examination fails to permit any such identification. The headdresses of figures 11–15 are all unique. Figures 11 and 12 are further distinguished by marked facial distortion. In figure 11 this effect is due in part to pellets applied to the upper lip presumably to represent lip-plugs. Similar ornaments may have broken off figure 14, which wears a collar of the same sort. Lip-plugs are to be seen also in figure 15, a specimen of unusually fine workmanship.

Two traits may be said to characterize the members of this group: (1) Elaborate headdress; (2) a particular form of head and face. Intimations of this headform are already seen in the plate 6 group, notably in figures 11 and 12. Like the head form of plate 3 type figurines, maximum facial breadth occurs at the level of the mouth, and from this level upward the face becomes progressively narrower. Prognathism, however, is here much less pronounced, and the jaws do not have the marked downward slant that characterizes the plate 3 type. Again, it may be noted that the chin is here less well developed and often obscured by what we should call a "double chin." Substitution of the appropriate style of headdress and manner of representing the hair would readily convert these specimens into the plates 10–12 type.[9]

In the two instances in which a part of the torso is conserved (figures 5 and 6), the neck resembles those seen in plate 3, while the chest finds its counterpart in the torsos of plate 7.

TYPICAL VAILLANT'S A TYPE (PLS. 10, 11, 12)

The general technique of the figures shown on plates 10, 11, and 12 is the same as that of the types already described. They are made of terra cotta red clay, typically rather coarse. The majority are larger in size than that prevailing in preceding groups. Many small heads of this type do occur, too, however.

The form of head and face is that described in connection with plate 9. No ear is shown, but a large circular earplug is characteristic. With few exceptions, the inverted V-shape which characterized the eyes in preceding groups has here been modified so that the eyes either slope obliquely downward toward the nose or else extend horizontally. The nose is short and broad. Typically the hair hangs down the sides of the head over the ears.

There is virtually no neck. The torso is short and frequently bedecked with ornaments. As a rule, there is little attention to anatomical detail. Both standing and seated figures occur. A complete standing figure may be seen in plate 10, figure 6. The legs are short and bifurcated to permit the figure to stand upright by itself. No distinction is made between foreleg and thigh, and, except for a few notches to suggest toes, the feet are not indicated. Figure 8 shows a seated figure; as the torso is not quite like any of the headless torsos collected to which legs are attached, it is impossible to infer whether the legs were originally bent to conform with a squatting posture, or whether they were no more than extended stumps like the one in the photograph. Headless torsos with pendulous breasts similar to fig-

[9] Compare specifically fig. 4 with pl. 12, figs. 4 and 5; and fig. 13 with pl. 12, fig. 12.

ure 11, on the other hand, make it quite likely that this is the head of a squatting figure.

It is of considerable interest to note that this type of figurine is either intimately related to, or identical with, Vaillant's Type A figurine in Valley of Mexico material (Vaillant, 1938, p. 536, fig. 1, *d*). That it falls definitely within the general Tres Zapotes tradition is not without significance, and we shall have occasion to refer again to this circumstance.[10]

In the opposite direction, we find this type sporadically at Uaxactun, Guatemala (Ricketson, 1937, pl. 74, row *c*, No. 1), and even in El Salvador (Weber, 1922, p. 635, Abb. 14, 15). Present evidence points to Tres Zapotes as the source of this far-flung distribution.

TYPICAL GROTESQUE VARIANTS (PLS. 13, 14)

Plates 13 and 14 represent a fairly homogeneous group made of the same terra cotta red clay as the group just considered (pls. 10–12). Typically its members are larger than the latter group, although individual specimens are occasionally quite small. The eyes, while made in the same technique, are ranged obliquely downward from their outer corners to the nose (except in two or three cases in which they are horizontal), and this creates a Mongoloid appearance. The nose is long and prominent, often convex in profile, and generally provided with a broad extremity and dilated nostrils. The lips protrude much more than in types already considered, and the perforations at the corners of the mouth may, instead of being circles, take the form of a deep irregularly shaped grove.

The hair is sometimes shown in bangs over the forehead and hanging down over the ears on either side of the face. The headdresses vary, but two types predominate: one, an elongated wrapped or coiled turban; the other, a broad lower headdress featuring a crescentic ornament that hangs low over the forehead, reaching almost to the nose.

The torso of these figurines, as seen in plate 13, figure 3, is as devoid of naturalistic details as that of the standing figure shown in plate 10. It is extremely flat and, like the latter, has bifurcated feet. Neither specimen can hardly be said to possess a neck.

The frequently grotesque character of the faces in this group sets them off rather sharply from those previously discussed and makes their identification a simple matter. Despite this fact, it is rather obvious that they share a great many traits in common with the other types considered up to this point. We shall attempt later to show that they can be linked by transitional forms with some of these, and that they need not, therefore, be regarded as at all foreign to the main body

[10] For other Valley of Mexico examples, see Boas and Gamio, 1921, pl. 44, Nos. 2, 14, and 17; pl. 45, No. 6; pl. 43, No. 20.

of Tres Zapotes hand-made figurines. In fact, they seem to be all but unknown elsewhere. Staub shows one specimen from the Huaxteca (Staub, 1921, pl. 2, fig. 30), but not a single example appears in the published items of the Strebel collection (Strebel, 1885–89). Two specimens from Cempoala and one or two from El Salvador in the collection of the American Museum of Natural History are reminiscent of the type, but the resemblances are too slight to permit conclusions.

INTERRELATION OF TYPICAL TYPES (PL. 15)

In order to emphasize the essential unity of the figurines which have been shown in plates 1–14, three series have been set up on plate 15 showing how one type readily merges into another. In each series one can discern easy transitions through three principal variants of the Tres Zapotes hand-made figurine. Beginning at the extreme left with (1) the grotesque type of plates 13 and 14, we pass through (2) Vaillant's A type of plates 10, 11, and 12, occupying a position midway in the series, into what may be termed (3) the classic Tres Zapotes type of plates 1–5. What at first seemed a despairingly heterogeneous collection of figurines is thus seen to consist of types which bear an evident stylistic and conceptual relationship with one another. This point is further emphasized in our discussion of plate 30. Its full significance cannot, at present, be interpreted. It is impossible, on the basis of the evidence now available, to derive from the differences observed among these specimens any chronological implications. Such differences may, perhaps, merely reflect the individuality of individual artists, or they may conceivably be regional variations of the separate small communities which, in all probability, made use of Tres Zapotes as a religious capital.

Let us consider now the distribution of the classic Tres Zapotes type of figurine. The type is so rare in collections from other sites that there can be little doubt that it emanates from Tres Zapotes or the immediate vicinity. We find it, of course, in the Tuxtla collection of Seler-Sachs (1922, vol. 6, pl. 10, p. 18). A variant appears in the Batres collection from the vicinity of Alvarado (Batres, 1908, pl. 25, fig. 2.) Strebel found a good example of it at Misantla, where it must have been unique, for he comments on the unusual form of the eyes and remarks that the type reminds him of the Palenque bas-reliefs, an observation in which we have been unable to concur (Strebel, 1885–89, vol. 2, pl. 12, p. 34). In the Strebel collection there are also variants of this type of figurine from the Rancho El Pantaño and Las Animas (Krickeberg, 1933, grab. 36 and 37, respectively). Variants have turned up also in the Huaxteca (Staub, 1919, pl. 5, figs. 14 and 15), and, as previously noted, in the Valley of Mexico. The American Museum of Natural History exhibit from San Juanico, D. F., includes specimens resembling those of plate 3.

A UAXACTUN TYPE (PLS. 16, 17)

These figurines differ considerably from the preceding types. Most of them are of red clay, although some are brown. In some instances, and possibly in all cases, they were white-slipped. The specimen shown in plate 17, figure 1, retains nearly all of its white slip, and the hair has been painted red.

The faces are round. True headdresses are rare. Occasionally what appears to be a tight-fitting cap is worn, but for the most part these figures are bareheaded and the hair is indicated by a raised area upon which lines are scratched. Pompadour, bangs, and other styles are represented. The nose is triangular in shape and in more than half the cases lacks the nostril perforations. The eyes are either almond-shaped openings or crescentic slits. In two cases (pl. 16, fig. 6, and pl. 17, fig. 8) the opening is double. Rarely is there a central perforation to indicate the pupil. The mouth consists ordinarily of a simple horizontal groove, generally giving the effect of a slight smile. In plate 17, figure 8, it is made by two triangular perforations in much the same manner as the eyes. The lips may be thick and realistically modeled, or scarcely indicated at all apart from the fissure denoting the mouth. One specimen (pl. 16, fig. 1) has a wrinkled face; several others, notably figures 9, 10, and 12 of the same plate, exhibit dimples in the cheeks. The circular earplugs are lacking, and the ears in many cases stand out almost at right angles to the head.

Figurines of this type occur sporadically in collections from the Gulf Coast. One from San Eligio, Veracruz, may be seen in the Strebel collection (Strebel, 1885–89, vol. 2, pl. 12, fig. 47). One from the vicinity of Alvarado is figured by Batres (1908, pl. 19, fig. 2), although in this case the eyes are distinctly perforated for the pupils. Seler (1908–23, vol. 5, pl. 18, top row, center) shows us a specimen from Teotihuacán. If, however, this type is foreign to Tres Zapotes tradition (and this seems likely), it is probably not to the north or west that one must look for the source, but to the east and southeast. We find it, for example, in the Guatemala highlands (Gamio, 1926–27, p. 130, figure in upper left-hand corner), in the Ulua Valley (Gordon, 1898, pl. 10, *a*), at Uaxactun (Ricketson, 1937, pl. 74, row *a*, No. 1; row *b*, No. 3; row *c*, Nos. 2, 3, 4), and in British Honduras (Gann, 1939, pl. 6, fig. 2; resemblance not close). The Uaxactun examples, similar even to the detail of the dimpled cheek, are particularly convincing.

BABY-FACES (PLS. 18, 19)

These are the baby-faces of so-called Olmec style. None are of typical Tres Zapotes red clay, although three examples are red in color. Typically they are of White or Brown ware. Originally all of them were probably white-slipped.

The modeling is more realistic than with the typical Tres Zapotes figurines. The eyes are shown either closed or in the form of narrow slits. Except for the single variant shown in plate 18, figure 2, central perforations in the eye do not occur. The nose tends to be short and broad, and usually, though not always, the nostrils are indicated. No ear ornaments are worn. Typically the mouth droops somewhat at the corners. Ordinarily it is shown in its entirety, rather than merely suggested by corner perforations. Headdresses are rare and, when present, are quite simple. Often a forelock of hair is worn over the middle of the forehead. The faces may be either short and round or long, but, in any case, the cheeks are puffed, and there is a suggestion of "double chin."

In both of these plates the central figure is hollow; all the others are solid. The hollow figures are of a very thick ware.

Some of the figurines of this group resemble somewhat the famous monolithic head of Tres Zapotes, the Cabeza Colosal (Stirling, 1939, p. 185). Plate 18, figure 9, and plate 19, figure 5, probably show the closest resemblance, although no figurine of the group approaches the artistry of the Cabeza.

Figurines in this style have a wide distribution. Locally they are well represented. Batres (1908, table 45, left) shows an interesting specimen from San Andrés Tuxtla and one from the highway between Veracruz and Alvarado (1908, pl. 8, fig. 1). In the former case the baby-face is the central feature of the headdress of another type of figurine. Lehmann (1922, pl. 25) shows specimens from Santiago Tuxtla, from the eastern border of Zapotec territory (1922, pl. 32), and from Chiapas (1922, pl. 36). Joyce has reported two very fine specimens from the vicinity of Tonalá, State of Veracruz (Joyce, 1931, p. 17, and pl. B, fig. 1, *a*, *b*). These show a striking resemblance to plate 18, figures 5 and 7, although the eyes are different. Quite similar to the Tonalá figures, but still more like our plate 18, figure 1, are two figurines from Gualupita burials (State of Morelos) (Vaillant and Vaillant, 1934, fig. 14, Nos. 2, 3). Striking farther afield, we find baby-faces in Guatemala (Spinden, 1915, pl. 21, fig. 7), in the Ulua Valley, and at Lubaantun, in southwestern British Honduras (Joyce, 1933, pl. 8, last two rows; pl. 9, figs. 1, 4, 8, 15).

The recent discovery of colossal heads at La Venta, State of Tabasco,[11] and the finding of a thoroughly un-Maya type of stone sculpture in Yucatan, one characteristic of which is the baby-face (Andrews, 1939, pl. 1, *e*), give us an almost continuous distribution of this style of figure from the central part of the State of Veracruz eastward along the Gulf Coast as far as Honduras. The westward extension is not so well delineated, but it goes much farther than the

[11] New York Post, March 26, 1940.

site in Morelos we have mentioned. Examples are numerous in the extensive private collection of Miguel Covarrubias from the State of Guerrero.

Despite the wide distribution, no site where systematic excavation has been undertaken (with the possible exception of Lubaantun, where, according to Thompson, "the 'baby-face' type, with puffed out cheeks, is well represented"[12]) has yielded any great quantity of these figures. The type appears intrusive at Tres Zapotes. It may possibly have drifted in from Honduras.

It would be of considerable interest to ascertain whether the Totonac smiling figures evolved from the baby-face type. One sees occasionally baby-face specimens which seem to foreshadow the well-known Totonac type in feeling. An example is plate 18, figure 3. Moreover, the baby-face type at Tres Zapotes is definitely older than the smiling Totonac type, the latter being associated exclusively with surface burials. Among the hollow Tres Zapotes figurines are to be found specimens which give the impression of being possible links in the chain of such an evolution, and these will be noted. Rigid confirmation of this hypothesis by stratigraphic methods is, of course, lacking.

MORELOS TYPES (PLS. 20, 21)

We have here a group of figurines differing radically from preceding types. They are not made of the typical Tres Zapotes red clay; some are gray, some yellow, and some a dull red. Plate 20, figure 15, and plate 21, figure 14, are of light gray clay, probably containing volcanic ash.

Typically these heads are small in size. They are flat and the back is slightly concave. Headdresses include hood and turbanlike forms and a small conical hat. Occasionally only the hair is shown. The eyes may be long oblique slits without central perforation, or they may be almond-shaped, placed horizontally or nearly so, and provided with central perforations which are either circular or in the form of linear indentations parallel with the nose. The nose is triangular in shape and lacks nostril perforations. Treatment of the mouth varies considerably. Corner perforations are usually absent. The lips are thick, and the upper one often approaches the nose. The circular earplug is usually lacking, although in rare instances it is present. When the ear is indicated, it exhibits the incisions so frequently observed in other figurine types.

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[12] Joyce, Clark, and Thompson, 1927: Thompson's discussion of the figurines. See, also, pl. 18, fig. 1, first two figurines of first row and second one in second row; pl. 19, fig. 2, third figurine in first row; and pl. 20, fig. 2, second specimen, which differs from those shown here in that the eyelids are in relief, but shows considerable resemblance to the Cabeza Colosal.

Figures 9–14, plate 21, are distinctive in that the eyelids stand out in relief.

This group shows closer affiliations with certain Mexican highland types than any other. A number of specimens in plate 20 suggest Vaillant's type Cix found in Gualupita II (Vaillant and Vaillant, 1934, fig. 10, Nos. 1, 3, and 7. Compare especially with plate 20, figs. 2, 3, 5, and 9). Those in the lower half of plate 21 resemble type K, a type hitherto thought regional for the state of Morelos and regarded by Vaillant as diagnostic of Gualupita I (Vaillant and Vaillant, 1934, fig. 8, Nos. 16, 17, 19, and 21). The Gualupita specimens, however, appear to be somewhat cruder than those shown here.

The type is not unknown in the Huaxteca (Seler, 1908–23, vol. 5, table 20, fig. 2, top row, center), and it may be mentioned, also, that a solitary specimen in the San Salvador collection at the American Museum (museum number 1/1715) strongly resembles figure 2 of plate 21.

VARIANTS (PL. 22)

The figurines shown on plate 22 represent several subtypes or variants of forms already discussed. Figures 1–4 are obviously variants of the plate 1 and plate 2 type. Figure 3 has what appears to be an animal headdress; the others are wearing stockinglike caps. Note the variable treatment of ear and earplugs.

Figures 5–10 seem not far removed from the type shown in plates 6 and 7. A unique feature, however, is the shrunken cheeks with vertical incisions. This small group may well be attempts, within this general tradition, to represent the Old God (Fire God). Figure 6, more than any of the others, approaches the conventional representation of this god. Figure 16, if judged mainly on the basis of the cheeks, could be regarded as one of this group.

Figures 11–15 are conspicuous for their beards, but do not give as definite an impression of age as those just noted. The last two in the group show crude attempts at representing side whiskers as well as chin whiskers. All are perhaps variants on the Old God theme.

Figures 17–20 can probably be regarded as crude variants of the plates 6 and 7 type, all of them below average in size.

VARIANTS (PL. 23)

This group, like the preceding, consists essentially of variants, subnormal in size, of the types shown in plates 1, 2, 6, and 7. While retaining the typical headdresses, ear forms, and eye technique of the latter types, many of the faces are of the baby-face variety. This is especially true of the third row, where figure 16 is outstanding in this respect.

AN ABERRANT GROUP (PL. 24)

We have on plate 24 a group of rather aberrant specimens possessing a fair degree of homogeneity within itself. They reflect both the plate 3 type and the nearly complete specimen shown on plate 15. Hunchbacks with long protruding chins predominate. Figure 4 is really transitional between plate 1 and plate 3. (Compare especially with plate 1, figure 4, and plate 3, figure 7.) Figure 6 would make a good hypothetical link between the very crude style represented by plate 15, figure 1, and the relatively more refined style of plate 3, figure 14.

Figure 9 is undoubtedly the most aberrant of the group. The bulbous appendage on the chest seems to grow out of the neck and yet, at the same time, to be suspended by some sort of heavy supports passing over the shoulders, as though it might be a burden of some kind (a gourd?) carried in this way.

Figurines shaped like figures 5, 6, and 7 occur in the early Uaxactun material (Ricketson, 1937, plate 71).

TWO ABERRANT GROUPS (PL. 25)

Two aberrant groups are shown on plate 25. Figures in the upper half of the plate are muzzled. Vaillant (1935, fig. 6, No. 2) found muzzled figurines belonging to his type Di in Gualupita I. Staub (1935) mentions the occurrence of muzzled figurines in the earliest levels at Cacalilao, north of the Panuco, in the Huaxteca. Joyce, Clark, and Thompson (1927, pl. 19, fig. 2) have found such figurines in British Honduras, and Joyce (1933, text fig. 5 and comment) observes that the muzzle was part of the accoutrements of ball-players, for which reason he suggests that, in figurines, it is the insignia of Quetzalcoatl as Ehecatl, patron of the ball game. In the great collection of the Trocadero, published by Hamy (1897, pl. 9), there is a statue of Totec, military companion of Quetzalcoatl, which suggests the type of figurine under consideration; this statue is believed to have come from the State of Tamaulipas. It must be admitted, however, that none of the illustrations cited bear a very close resemblance to those shown here. The latter possibly represent an early regional type of Ehecatl.

The figurines in the lower half of the plate are, no doubt, variants of the type seen in plate 1, figures 8 and 10, lacking, for the most part, the sharply pointed chin that characterizes the plate 1 group. The features are less realistic, although hair, rather than headdress, is the rule.

MISCELLANEOUS VARIANT AND ABERRANT SPECIMENS (PL. 26)

Plate 26 shows a varied assortment of aberrant and variant types of Tres Zapotes figurines.

Figures 1 and 2 resemble each other in general features, but cannot be definitely assigned to any major group. The eyes of figure 2 lack the corner perforations, while in figure 1 the central perforations, instead of being circular, have been extended laterally almost to the exclusion of the corner perforations.

Figure 3 is unique. It is a two-faced head made of red clay and originally white-slipped. The surface is quite smooth. Each face has puffy cheeks with vertical striations and a well-formed chin. A forelock of hair extends over the middle of each forehead, and a wide band around the head appears to hold the hair in place. Single, almond-shaped excavations pointing upward and outward represent the eyes.

Figures 4 and 5 resemble each other to the extent that each has a hoodlike headdress, an oval face, and a long triangular nose. The furrows alongside the nose of the former give an aged, wrinkled appearance. The perforations for eyes, nostrils, and mouth conform to the general Tres Zapotes tradition, even though it is impossible to fit these figurines into a major group.

Figures 6 and 7 are variants of the type shown in plates 16 and 17. In figure 6 the features are very crudely indicated. In figure 7, while the eyes are quite typical of the plate 17 type, other features are much more in keeping with the baby-face type, as seen for example, in plate 18, figure 7.

Figure 8 is a bearded variant of the plate 7 type. Figure 9 is a particularly crude example of the same, or of the plate 3 type. Figure 10 is a genuinely "archaic" specimen not obviously related to any of the others.

Figure 11 belongs to the plate 21 type, but is extraordinary on account of the very unusual cuplike ear ornaments.

In figure 12 the curved upper lids of the eyes, standing out in relief, and the unusual headdress are the aberrant features.

Figure 13 is a variant of the plate 1 type; figure 14, of the baby-face type (compare especially pl. 23, fig. 16); and figure 15, of the plate 17 type.

Figure 16 has the full round face of the baby-face type, but differs from the baby-faces in that the eyes are shown open, with both the central and the corner perforations. Moreover, it lacks ears.

Figures 17 and 18 are variants of the plates 16 and 17 type, from which they differ chiefly in the treatment of the eyes. Not only the eyes, but the headdress of figure 18, link it with specimens in plates 1–7. It is thus transitional in style between the latter and the type shown in plates 16 and 17.

Figure 19 is too incomplete for classification. The upper half of the head is broken off and nose and mouth are greatly eroded. Per-

forations at the sides represent earplugs. A thick disk-shaped object is held against the right side of the torso by the pressure of the arm.

MISCELLANEOUS VARIANT AND ABERRANT SPECIMENS (PL. 27)

Miscellaneous variant and aberrant specimens of Tres Zapotes figurines are also shown on plate 27.

Figures 1 and 2: Variants of plate 1 type.

Figures 3, 4, and 5: Crude figurines combining features of both plate 1 and plates 16 and 17 types.

Figures 6 and 7: Two unusual specimens. Figure 7 has a hollow cylindrical core extending from the top to the level of the mouth.

Figures 8 and 9: Variants of plates 16 and 17 type. Note eyelids in relief in figure 8. Figure 9 is hollow.

Figures 10 and 11: Variants of plate 1 type. Note eyelids in relief and peculiar expanse of cranium suggestive of hydrocephalus.

Figures 12 and 13: Variants of plate 12 type. These two specimens look considerably like a Middle Zacatenco type from the Valley of Mexico (Vaillant, 1935, fig. 12, No. 9).

Figures 14–17: Four aberrant specimens differing considerably from each other, although made of the same clay. Figure 14 greatly resembles a specimen in the Batres collection from the vicinity of Alvarado (Batres, 1908, pl. 26, fig. 3).

PROFILES (PL. 28)

Plate 28 shows profiles of some of the major type specimens of the preceding plates. The corresponding full-face figures are given in the following tabulation:

Profile Plate 28:	*Full face*
Fig. 1	Plate 5, fig. 2.
Fig. 2	Plate 10, fig. 7.
Fig. 3	Plate 10, fig. 10.
Fig. 4	Plate 13, fig. 9.
Fig. 5	Plate 13, fig. 8.
Fig. 6	Plate 13, fig. 7.
Fig. 7	Plate 18, fig. 7.
Fig. 8	Plate 20, fig. 13.
Fig. 9	Plate 17, fig. 6.
Fig. 10	Plate 16, fig. 7.
Fig. 11	Plate 16, fig. 2.
Fig. 12	Plate 21, fig. 9.
Fig. 13	Plate 20, fig. 14.
Fig. 14	Plate 21, fig. 1.
Fig. 15	Plate 21, fig. 4.
Fig. 16	Plate 21, fig. 13.

EARLY DEITIES (PL. 29)

The figurines of the first row of specimens shown on plate 29 are reminiscent of the "old woman type" found by the Ricketsons at Uaxactun (Ricketson, 1937, pl. 75, *d*, *e*, *e'*), except that the fourth one is bearded.

Those of the second row are somewhat similar. Figures 8 and 9 resemble the Uaxactun puffed-cheek whistle type (Ricketson, 1937, pl. 75, *f*).

Of particular interest are the figurines of the third row. Figures 10 and 11 seem to be crude and unsuccessful attempts at making the personage seen in figures 12 and 13, while figure 14 would appear to be a stable conventionalized representation of the same personage. There can be little doubt that this personage is a rain deity. He resembles the idol at the top of San Martín Pajapan Mountain (Blom and LaFarge, 1926, vol. 1, p. 47, fig. 43), whose peak can be seen on clear days from Tres Zapotes, and it is, of course, a commonplace that mountain tops frequently served as shrines of the rain god. But we have much more specific evidence. This figurine bears unmistakable resemblance to the Zapotec rain god Cocijo as we find him on the earliest of the funerary urns—for example, the miniature vases from the tombs of Monte Albán I. Comparison with the Tlaloc of the famous jade vase from Nanchititla, State of Mexico (Plancarte collection) (Caso, 1938, p. 33), gives further confirmation of this identification. Even more illuminating is a figurine from the Arroyo Guasimal, in the collection made by Weyerstall (1932, pl. 9, *c*), which combines the typical encircled eyes of a Tlaloc with the "tigerlike" nose and mouth parts of Cocijo, such as we have here. Incidentally, this figurine should be compared, also, with the mask on the reverse side of Stela C (Stirling, 1940, p. 8, fig. 7).

MAJOR ARCHAIC TYPES (PL. 30)

All the major types of solid, hand-made, Tres Zapotes figurines, with the exception of the baby-face type, have been assembled on plate 30 for quick reference and comparison. The types of which they are representative are noted in the following tabulation:

Plate 30, figs.:		*Type*
1 and 2	Plates 1, 2	Pointed chin.
3 and 4	Plate 3	Prognathous.
5	Plates 4, 5	Rectangular face.
6 and 7	Plates 6, 7	Beatific.
8	Plate 9	Transitional.
9 and 10	Plates 10, 11, 12	Vaillant's A.
11 and 12	Plates 13, 14	Grotesque variants.
13 and 14	Plates 16, 17	Uaxactun.
15 and 16	Plates 20, 21	Morelos.

It should be noted that, despite differences due to variations in headdress and shape of face, figures 1–10 all exhibit the same technique of representing eyes, nostrils, and mouth. Moreover, it requires no great stretch of the imagination to see in figures 11 and 12 either a crude prototype or a degenerated form of the preceding. All of the various types represented in figures 1–12, therefore, appear to be but slightly diverging trends within a common tradition. This conclusion is strengthened by the fact that any attempt to classify these figurines on the basis of headdress elements, manner of representing the ear, or type of ear ornament would cut directly across the groupings which have been made in plates 1–15. In every grouping, for example, are to be found some figurines with plain or grooved ear, some with circular earplugs, and some bearded figures. The turban headdress is all but universal.

When it comes to the baby-faces (pls. 18, 19) and the types represented in this plate by figures 13 and 14 and figures 15 and 16, respectively, the association with the common tradition just noted becomes dubious.

UNCLASSIFIED FIGURINES (PL. 31)

Miscellaneous figurines difficult to classify are collected on plate 31. Figures 1–5 constitute a small aberrant subgroup. Note the perforations for suspension in figure 1. Figure 3 achieves considerable realism and is artistically so superior to the others that it is perhaps a mistake to include it with them.

Figures 6, 7, 20, and 23 are unclassifiable, while the very grotesque group figures 8–19, some of them possibly intended to represent birds, seem to be related to the figurines of plate 29.

Figure 22, contrary to the impression created by the photograph, is solid. It is made of hard, sandy, red clay and has a perforation at the back of the head. The portrayal of a child, seated and pensive, is delightfully realistic.

Figure 24, a hollow figurine made of orange clay, represents a hunchback. Figures 24 and 25 both recall certain specimens in the Seler-Saville collection from Oaxaca, at the American Museum of Natural History.

FIGURINE BODIES (PLS. 32–36)

Five general types of figurine bodies can be discovered among the solid, hand-made specimens, as follows:

A. The bifurcated-leg type.—Of these there are two subvarieties: (1) Flat; (2) steatopygous.

The flat specimens with bifurcated legs may be seen in plate 32, figures 1 and 2. They appear to wear a belt and a fringed apron, these articles being indicated by incisions. The legs are abnormally short. The feet are indicated only by slight incisions. It is evident from the

construction of these figurines that they were made to stand upright without danger of toppling over. Of plate 35, figures 4, 5, and 6 are probably variants of this type.

A nearly complete specimen of the steatopygous variety of the bifurcated-leg type is shown in plate 32, figure 3. Figures 4–10 are other examples, although steatopygy is less pronounced. All are well supplied with filleted ornaments about the neck, waist, hips, and pubic region. As a rule, the abdomen is more realistically represented than the breasts. The legs are disproportionately shorter, even, than in the flat specimens. Bodies of this type are probably associated with heads of the type shown in plates 10–12.

B. Simple, unadorned, standing type.—These are shown in plate 33. They are completely devoid of ornament and wearing apparel. A possible exception is figure 13, the lower perforated portion of which may indicate clothing of some kind. A conspicuous feature in most cases is the high narrow waist, exaggerated occasionally to the point where it might almost be termed a wasp-waist. The breasts are rarely accentuated. In figures 10 and 11 not even the navel is shown, although this may be due to attrition. Complete arms occur only in figures 9, 15, and 16. In the first instance, the arm takes the form of an extended stump, in the second, it is bent at the side, and in the third, the two arms are folded across the chest, with one hand distinctly visible. In the only case in which an entire leg remains intact (fig. 10), it appears as a slightly bent stump. These torsos are the only ones having a back that is realistically modeled, rather than flat.

It is not at all certain to what head types these bodies belong. There is a suggestion about some of them of the fragmentary torso parts to be seen in plate 24, while the clay of figure 16 points strongly to plate 20, figure 15.

C. Seated figures.—These fall into three subvarieties:

(1) Figures wearing filleted ornaments about neck, waist, and pubic region. These are the seated counterparts of Type A, and like them are small-breasted. Plate 34, figures 1–4, shows the best examples.

(2) Figures wearing pubic apron or skirt, but no ornaments. In contrast to the ornamented group, these figures have very full and often pendulous breasts. (See, for example, pl. 34, figs. 7–14.) One wonders whether the difference in attire corresponds with an actual difference which prevailed between the older and the younger women, or between the married and the unmarried.

(3) Nude figures with the legs crossed, often with the body leaning forward slightly and the hands placed upon the knees (pl. 35, figs. 1–3). These are the seated counterparts of Type B. They may be male.

D. Figurines with tripod support.—Examples of this type are shown in plate 35, figures 7–11. A pair of roughly conical stumps

serve as the anatomical legs, while a third stump, bulkier and less regular in form, extends backward from the base of the torso to complete the tripod. One or two belts surround the waist, while additional strapping, or else a leaf-shaped apron, covers the pubic area. There may be some question as to the propriety of including this group along with figurines of human type, inasmuch as the only complete specimen (fig. 11) is a monkey. Figure 10, however, might well have been human. It would be impossible, on the basis of torso alone, to identify any of the group. Figure 12, a purchase specimen, is shown here for comparison. It consists only of head, apparently human, and the tripod support.

E. Club-legged, steatopygous type.—This type is shown in plate 36, figures 1–8. The torso is nude except for a scanty loin cloth. It is well-proportioned. The breasts are distinctly formed but never pendulous. The abdomen is full and rounded—sometimes definitely obese. In a few cases, it might be suspected of indicating pregnancy. The upper part of the thigh may be nearly globular in shape. In one instance (fig. 4) the leg is bent. Figure 8 is unusual because of the cylindrical object held under the left armpit. Bodies of this type are very probably associated with heads of the plates 6 and 7 type.

Besides the five main groups just described, a small number of specimens which do not fit into these classifications may be noted. They are shown in the lower half of plate 36. Figure 9, in which the torso is much compressed, is really a variant of the bifurcated-leg type, similar to the one in plate 10, figure 6. Figure 10 is unusual on account of the leg band and the skirtlike extension to the rear which gives the figurine a nearly triangular base for support. Figure 11 is extraordinary by reason of the monkey head (?) which protrudes from the body at the level of the genitals. Figure 12 is unique because of the collar and breast ornament, as well as the position of the circular earplugs.

Figures 13–16 are the only figurines found in which the nipples are indicated. They are not otherwise radically different from prevailing types. Figure 16 might be considered a particularly crude example of the club-legged steatopygous type.

PRIMITIVE MAYA AND ALLIED TYPES (PL. 37)

Figure 1, a solid figurine, is made of dark, bluish gray clay. Figures 2 and 3, which are hollow, appear on the inside to be made of exactly the same clay as figure 1, while outside they are cream-colored. This cream-colored layer has considerable depth, as may be observed by inspecting the fractured surface on the forehead of figure 2. It would appear, then, that these figurines have been fired in the same technique as that used in making the ware of pottery which we have called "Smothered." They are the only examples of this ware to be

found among the figurines. The eyes and ears of figures 1 and 2 are in true Tres Zapotes style, while the one intact eye of figure 3 is of the coffee-bean type.

The remaining figurines shown here are of Brown or Rust Red, rough ware. They possess a certain degree of unity of style, with heavy filleted eyelids, a long nose with dilated nostrils, and thick lips as prominent features. Figure 4 has a tubular body, but the head is solid with concave back. Figure 6, on the other hand, is hollow throughout. Figure 9, although of the same general shape, is solid throughout. In figure 11 the head is divided into upper and lower compartments by a partition possibly intended to represent the roof of the mouth, the lower surface of which can be seen in the illustration. Figure 7, by reason of its unusual eye form, is aberrant. Figures 9 and 10 both wear lip ornaments.

Some, at least, of these figurines are probably whistles. Rickards' collection of pottery and whistles from the mounds of Tabasco contains a specimen closely resembling the type of figurines we have just been discussing (Rickards, 1910, 1, p. 78, bottom row, third from right). The Ganns (1939, pl. 3, No. 4), at Nohmul, in the Corozal District of British Honduras, obtained an effigy jar strikingly like our figure 4, while Thompson (1931, pl. 27), in the southern Cayo District, found incensarios with effigies not unlike figure 9, resting upon a flat background and having a tubular base for support. Dieseldorff (1926–33, vol. 3, pl. 4, No. 14) shows a figurine from Tzultacás, Guatemala, not unlike figure 6 (although, in Dieseldorff's specimen, the nose terminates in a horizontal bar ornament which does not, as in figure 6, take the place of an upper lip). Worthy of mention, also, is the presence among Gamio's specimens from Finca Arevalo of a figurine quite reminiscent of this group (long nose and pellet of clay on lower lip suggestive of figure 9 and long flanges at the sides of the face as in figure 4), which Gamio (1926–27, p. 202) designates as primitive Maya. It is apparently a type rather widely distributed throughout northern Central America.

FIGURINES REFLECTING THE HIGH CULTURES

A TEOTIHUACÁN TYPE (PL. 38)

The figurines shown on plate 38 are made of an orange-colored clay. The heads are solid, with a slightly concave back, but the neck (and, in that case, presumably the body also) may be hollow, as in figure 4.

The type is widely represented in collections from Totonac territory. Batres, for example, shows specimens from the south shore of the Papaloapan River and the vicinity of Alvarado (Batres, 1908, pls. 6, 9 (fig. 2), 10 (figs. 1, 2), 15 (fig. 1), 28 (fig. 1); see also

Danzel, 1923, vol. 2, fig. 44). One of these, a seated female figure with legs crossed, has a headdress very similar to that of figure 5. Another exhibits the same sort of large circular earplugs, similarly placed, as those of figure 4.

We find the type again in collections from the Huaxteca: the same triangular faces; almond-shaped elevations for eyes, placed beneath prominent brow ridges; thick lips, slightly parted; large circular or disk-form ear ornaments directed forward; and wide headdress in the form of one or more filleted bands across the forehead, sometimes beaded as in figure 5, sometimes striated vertically as in figure 7. A number of examples occur in the Huaxtec collection of the American Museum of Natural History (Stout, 1938, pl. 8, top row).

Of greater interest, however, is the fact that the type occurs very prominently in Teotihuacán culture. The great atlas of Peñafiel figures specimens nearly identical with figures 4, 6, and 7 (Peñafiel, 1900, pl. 5), and similar heads show up in the material from Coyotlatelco (Vaillant, 1938, p. 537, fig. 2, *q*).

The type forms only an insignificant fraction of the Tres Zapotes material, from which we may surmise that it represents foreign influence, emanating, in all probability, from the Valley of Mexico on the Teotihuacán time level.[13]

SOME MIDDLE AMERICAN DEITIES (PL. 39)

A number of familiar representatives of the Middle American pantheon are shown on plate 39. Figure 1, a solid white-slipped figurine, represents Quetzalcoatl in his role as Ehecatl, god of the wind, a deity generally assumed to be of Nahua origin.

Figure 2 is obviously a Tlaloc. This figurine is rather crudely made out of coarse brownish clay. The illustration gives the erroneous impression that it is hollow. Actually, it is solid from the level of the nose up, the hole through the top being accidental. The lower half of the figure only is hollow. It was found at a depth of about 2.7 m. in Mound F of the Ranchito Group.

Figure 3 is the mask of Xipe, god of the flayed, wearing the skin of the sacrificial victim. This and other Xipe figurines came from the excavations in and around Mound D of the Ranchito Group at a depth of 1.5 to 2 meters. The cult of Xipe is thought to have originated at or near the town of Yopico, close to the boundary separating the States of Oaxaca and Guerrero (Caso, 1936, p. 27). It had a widespread distribution reaching as far south as Nicaragua (Spinden, 1928, p. 189), was intensely developed at Monte Albán, whence it may have spread to the Valley of Mexico, but does not

[13] Compare, also, with the head on incense burner from Santiago Ahuitzotla (Tozzer, 1921, p. 14), and with the Valley of Mexico (Toltec) specimen in Joyce (1927, p. 107, middle row, right).

appear on present evidence to have achieved any great popularity either at Tres Zapotes or at other sites near the Gulf.

Figures 4 to 7 inclusive are masks of the Old God in full-fledged Teotihuacán style (Peñafiel, 1900, pl. 14). These and similar specimens from other sites in the Papaloapan Basin—for example, the Arroyo Guasimal (Weyerstall, 1932, pl. 9, *d*)—are an important link in the chain of evidence for strong Teotihuacán-Toltec influence on the Middle Tres Zapotes B level. The same deity appears in somewhat different style in figures 8, 9, 10, and 12. Figure 12 is strikingly like the lower part of an effigy in the Strebel collection from the region of Atotonilco and Quimistlán, Veracruz, which Seler regarded as an importation from Maya territory (Seler, 1904 a, p. 108, fig. 24, *b;* also 1908–23, p. 455, abb. 45, *c*). Our specimens, however, are not glazed, like those which Seler discusses. The clay of figure 8 is red; that of figures 9, 10, and 12, dark gray. The very wide range of distribution of figurines of this type is evident from the fact that examples occur in both the El Salvador collection and in the Seler-Saville collection from Cuilapan, State of Oaxaca, at the American Museum of Natural History. A third variant, also of wide distribution, is that seen in figures 11 and 13. Danzel (1923, vol. 2, fig. 39) shows a fine specimen from Cempoala, in Totonac territory, which he says resembles the Maya Sun God Kinichahau. Our specimens have the same sort of eyes, nose, and wrinkled cheeks, but lack the filed teeth which commonly characterized this god. Mrs. Nuttall (1910, pl. 9, fig. 1) provides an example from the Island of Sacrificios; Weyerstall (1932, pl. 10, *c*), one from the Arroyo Guasimal. Examples are, of course, not lacking in Guatemala (for example, Cobán (Hirtzel, 1925, p. 669, fig. 5), in the lowland country, and Kaminaljuyu (Anon., 1936, fig. 2), in the highlands), nor from the Ulua Valley, Honduras (Gordon, 1898, pl. 8, *d;* see also Seler, 1908–23, p. 455, abb. 45, *d*), while from the tombs of Zaachila and Cuilapa, in the State of Oaxaca, come Zapotec versions of the same personage (Seler, 1904 b, pl. 35).

MISCELLANEOUS FIGURINES (PL. 40)

(Mostly unclassified)

A number of figurines from Middle and Upper Tres Zapotes, only a few of which can be identified or classified, are shown on plate 40. All are hollow except the three in the last row. Some are undoubtedly whistles. Whistles with two faces, as in figure 13, have been found at Lubaantun (Joyce, 1933, pl. 2, especially fig. 2), although they bear no close resemblance to the one shown here.

Figure 8 is perhaps a death god. Figure 10 is presumably part of a mask of the Old God, Teotihuacán style. (See discussion of pl. 39.)

Figure 11 is probably a spider monkey. Figure 12 may represent Ehecatl, the wind god.

Figure 14 is the only Aztec-type figurine found, which is rather remarkable, inasmuch as the region is known historically to have come under Aztec control, even to the extent that Aztec, or Mexicano, had become the dominant language.

Figure 15 shows a surprising resemblance to the face of the Aztec goddess Ciuacoatl (Danzel, 1923, vol. 2, figs. 52 and 53), on the one hand, and to an archaic figurine found at a depth of 2 m. at Tzultacás, Guatemala (Dieseldorff, 1926–33, vol. 3, pl. 4, fig. 15), on the other. The pellets of clay to represent the pupils of the eye are distinctive.

Figure 16 is very like an unclassifiable type found by Vaillant in Gualupita II, in the State of Morelos. (Vaillant and Vaillant, 1934, fig. 10, No. 11; compare, also, Noguera, 1930, fig. 45, *a*, a Tarascan specimen.) It may denote another link between that area and the coast, although it is surely as aberrant for Tres Zapotes as for the Mexican highlands. Observe, nevertheless, the tuft which passes over the center of the head from the middle of the forehead, a coastal trait often present in the case of the laughing figurines from Totonac country. As the top of the Gualupita specimen has been broken off, it is uncertain whether or not it shared this trait.

MOLD-MADE MAYOID FIGURINES (PL. 41)

Maya influence is marked in the figurines shown on plate 41. Figure 1 was found at the bottom of the west edge of the promontory in which the Ranchito Group of mounds is situated, among the debris washed down from the main terrace. It apparently represents a priest wearing the disguise of a large bird and in the act of presenting an offering. A figurine almost identical in conception was found by the Ganns at Nohmul, British Honduras (Gann, 1938, pl. 3, No. 2, *a*). A similar headdress may be noted on a Guatemalan specimen identified by Dieseldorff (1926–33, vol. 3, pl. 40 B, abb. 99) as Quetzalcoatl in the guise of Venus.

The little "tiger god" (fig. 2) was found in Mound D of the Ranchito Group. His posture, arms close to the sides, forearms flexed, and hands upraised with palms to the front, is characteristic of the Maya mold-made figurines from Campeche (Butler, 1935, p. 654).

Figure 3, on the other hand, takes the posture more common to this type of figurine as found in Veracruz (Butler, 1935, p. 648).

Figures 4 and 6 are examples of what has been called the "flying man" type or the "winged man." As defined by Butler (1935, p. 648), this is "a man, standing, with outstretched arms, shoulder wings, and a thick tubular collar or roll of fat at his neck." The wings of the specimens shown here have been broken off. Two speci-

mens exhibiting identical headdress, reported as coming from the Tuxtla region, are to be seen in the Batres collection. (Batres, 1908, pls. 45, 55. For a similar specimen from Yucatan, although in tripod form, see Lehmann, 1922, pl. 42.) In one of these a ring supplants the left hand; in the other, the right hand. The symbolism of figures of this type is not clear.

Figure 5, again, is in the Campeche style. The physiognomy, however, has its counterpart in a clay head from Nohmul (Gann, 1938, pl. 5, No. 2). Figure 9 appears to be a close relative.

Figure 7 is doubtless a variant of the Fat God of the Toltecs and the Totonacs discussed by Beyer (1928, figs. 1, 2; see also Strebel, 1885–89, vol. 2, pl. 14, No. 32). While the resemblance to his illustrations is not close, this specimen has one trait in common with them, the peculiar leaf-shaped ear ornament, a feature which he particularly stressed.

The deity represented in figure 8 has the right hand supplanted by a rabbit's head.

These figurines, like the preceding, are of pink or cream-colored clay (in one instance, orange) and belong to the Upper Tres Zapotes level.

MOLD-MADE MAYOID FIGURINES (PL. 42)

Additional mold-made figurines with distinctly Maya flavor are seen on plate 42. Again they are made of pinkish or cream-colored clay. Figure 2 had a brown slip; figure 7, white. They are either rattles, like figure 2, which contains several clay pellets, or whistles, like figure 4, in which the headdress is the mouthpiece. The outlet for air may be almost anywhere on the back of the figure. In figure 1 it is at the back of the head.

While the posture exhibited by figure 2 has been stated to be especially characteristic of the mold-made figurines of Campeche, its distribution is by no means limited to that area. Figurines similar in headdress, type of clothing shown, posture, and form of support are to be found, for instance, at Cerro de las Mesas (Strebel, 1885–89, vol. 2, pl. 32, figs. 35, 39, 44, 45); on the shores of the Papaloapan River;[14] on the Island of Jaina (Hamy, 1897, pl. 26, fig. 81); and even at Lubaantun (Joyce, 1933, pl. 1, No. 2—a head only).

Figure 7 is the "seated woman" type of figurine described by Butler (1935, p. 649). As she points out, it is a type that has a very wide distribution. Ordinarily the left hand rests on the knee, while the right hand holds a fan at the level of the waist. While some of the details are lacking here, the figurine conforms in the main to this characterization. Occasionally, a child is held in the left arm, as in figure 5, which, however, is atypical, since the figure is not seated.

[14] Batres, 1908, pl. 55. In this case, however, the eyes and mouth are perforated.

Figure 6 is of special interest for two reasons. The eyes are slightly crossed, and the face is tattooed. A tattooed figure from San Andrés Tuxtla occurs in the Batres collection (Batres, 1908, pl. 47). One from Santiago Tuxtla with two rows of dots around the mouth appears in the Seler collection from this region (Krickeberg, 1933, grab. 44), while from Yucatan comes a specimen showing greater similarity to the one in question than either of the Tuxtla examples (Krickeberg, 1933, grab. 45). Similar specimens have been excavated, also, along the Tenejapam River, near El Remolino (Weyerstall, 1932, pl. 1 and pl. 2, *a*). It is known, of course, that strabismus and tattooed skins were both marks of beauty among the Maya.

MOLD-MADE MAYOID FIGURINES (PL. 43)

There can be no question that the Mayoid figurines just described (pp. 105–106) were manufactured at Tres Zapotes, for not only are they made of the same material as the Upper Tres Zapotes Yellow and Pink ware (including Cream, Orange, and Brown) with their characteristic, smooth, chalky feel, but the very molds used, likewise of the same material, appeared in the course of the excavations. Figures 1 and 2 are fragments of such molds.

Parts of still other figurines of this general type are shown here. Costumes featuring a low belt and a paneled skirt, somewhat after the fashion of figure 10, are known from Campeche (Butler, 1935, p. 655, fig. 5, *a*) and Yucatan and from Cerro de las Mesas, Veracruz (Krickeberg, 1933, grab. No. 47, *b*).

Figures 5 and 6 are ornaments of large figurines. Except for an occasional stray limb, we found no trace of figurines large enough to have worn such ornaments.

"TOTONAC" FIGURINES (PL. 44)

The group of figurines shown on plate 44 is in the well-known style commonly called Totonac. The majority are of the laughing type with the tip of the tongue caught between the teeth. While many of the large specimens in this style which have been found elsewhere are provided with tubular extensions at the back which seem to have served for insertion into temple walls (Spinden, 1928, p. 166), the heads found at Tres Zapotes belong, as is evident from the complete specimens, to male figures which assume either a standing or sitting posture with arms extended, forearms flexed, and hands upraised.

Not all are laughing. Figure 6 has a particularly severe expression; it resembles greatly a couple of heads in the Batres collection from the vicinity of Alvarado (Batres, 1908, pl. 8, fig. 2, and pl. 11). Figure 9 might even be a death mask. Figure 7 reflects the possible baby-face origin of these figurines.

Figure 4 is unusual by reason of the marked slant of the eyes.

Figures 1 and 8 wear curious cone-shaped ear ornaments. A specimen in the Comargo-Strebel collection in Berlin from the Mistequilla region of Veracruz exhibits this trait (Krickeberg, 1933, grab. 39, *a*), as does, also, a standing figure from Cocuite, Veracruz (Blom and La Farge, 1926, p. 17, fig. 13).

All of these figurines are of pink or cream-colored clay. Figure 5 has a brown slip. All of these specimens come from the Upper Tres Zapotes level. They are not associated with yokes. Figure 8 is from Mound F; figure 11, from Mound C, in the Ranchito Group.

SOME "TOTONAC"-MAYA COMPARISONS (PL. 45)

In the group of specimens shown on plate 45 some interesting relationships are suggested. Figures 1, 2, and 3 show the baby-face motif as it might have been treated by artists working in the Totonac tradition.

Figures 5–8 will be recognized as the type of baby-face already shown in plate 18, figure 5, a type previously known from Tonalá, Veracruz, not far from the Tabasco boundary, and hence close to centers of Maya influence. For that reason it is interesting to compare these figurines with figures 9–16, a genuine Maya type. The similarity of facial expression, form of mouth, manner of showing the teeth, and shape of eyes is quite apparent. Faces clearly comparable to those of figures 9–16 may be seen on figurines from Labná, Yucatan (Thompson, E. H., 1897, pl. 12, Nos. 6, 8, and 11), on pottery vessels from Cobán, Guatemala (Seler, 1904 a, p. 98, fig. 19, *h*), and on figurines from Alta Verapaz, Guatemala (Dieseldorff, 1926–33, vol. 1, pl. 4, fig. 16), to mention but three Maya sites. The striations (rays) about the face in figure 9 and the filed teeth which are so conspicuous in figure 16 are both marks of the Sun God. However, a specimen very similar to those of this group, of unspecified Guatemalan origin, having crescents above the eyes and grooves at the sides of the face (but differing from these in that it wears a beard) is identified by Dieseldorff (1926–33, vol. 3, pl. 18; abb. 32 and commentary) as the Old God, Fire God, or God of the Uayeb, the five unlucky days at the end of the year. The wrinkles indicated by markings on the nose and the cheeks, as in our figures 10, 11, and 13, add plausibility to such an identification. The important point, however, is that a good case can be made for cultural relationship between a Coastal variant of the baby-face and a conspicuous type of Maya figurine.

But if the figurines we have just been considering seem to have seized upon the least pleasing aspects of the baby-face and intensified them, figures 17, 18, and 19 seem, in a style no less Maya, to have captured and preserved the joviality, plumpness, and rotundity of

such faces as we see in plate 18, figures 3 and 6. The mode of representing the hair in figure 19 is, according to Dieseldorff, typical of representations of Venus (Dieseldorff, 1926–33, vol. 3, pl. 10; abb. 15 and commentary.)

WHISTLES AND MUSICAL INSTRUMENTS

WHISTLES OF THE TUXTLA REGION (PL. 46)

Whistles of the type shown on plate 46, in the form of monkey, toad, or some other animal, very often holding a receptacle, appear to be a local specialty of the Tuxtla region. Batres (1908, pl. 44, fig. 1) shows such a specimen from San Andrés Tuxtla; Weyerstall (1932, pl. 11, *c*), one from the Arroyo Guasimal. A toad figure with crossed legs, similar to figures 10 and 11, occurs in the Maya collection of the Museo Nacional in Mexico City, but the provenience is unknown.

All the specimens shown here are of pink or cream-colored clay and have a smooth, chalky feel. Figure 5 is provided with two openings on each side.

OCARINAS (PL. 47)

The whistles and ocarinas of the group shown on plate 47 are made of cream, pink, or orange-colored clay. Some are plain, others assume human or bird-effigy form. Nearly all are from the excavations at the Ranchito site.

Similar specimens have been reported from the vicinity of Alvarado and from the Hacienda de San Francisco north of Tres Zapotes (Batres, 1908, pl. 39, fig. 3, and pl. 49, respectively).

BIRD EFFIGIES (PL. 48)

Bird effigies in the form of hollow tripod whistles occur in both the hard, coarse, Rust Red clay characteristic of typical Tres Zapotes figurines and in the Yellow or Pink ware common to the surface burials. Figure 6, in plate 48, is an example of the former; figure 17, of the latter. The feet of the bird and the tail make up the three supports. The tail is also the mouthpiece. Openings may be found on the back, the breast, or the sides of the figure. Figures 4 and 6 are provided with lugs for suspension.

Whistles of this sort were found by Ricketson (1937, pl. 77, *b*) below the bottom floor of E Plaza at Uaxactun. Commenting on them, he states:

> It has been suggested by Frans Blom that these whistles were used in hunting, their notes, whenever possible, reproducing the call of the bird or animal they represent; if this be the case, they would be carried suspended from the hunter's neck. Similar bird-form whistles are now made in Guatemala, but are used merely as toys for children. . . . No other site from which similar material has been recovered has produced whistles exactly comparable to these from Uaxactun . . . [Ricketson, 1937, p. 217.]

In view of this, we are probably justified in regarding some of these whistles as evidence of cultural affiliation with Guatemala.

It may be noted, in passing, that Batres (1908, pl. 40, fig. 1) shows a specimen from the vicinity of Alvarado which, except for the fact that it has no feet, is practically identical with figure 22.

Charles E. O'Brien, assistant curator of ornithology at the American Museum of Natural History, ventures the following identification of some of the bird-forms shown here:

Figs. 7, 8, and 9	Goose or swan.
Fig. 10	Goose (?).
Figs. 19 and 20	Goose or duck.
Figs. 15 and 18	Guan.
Fig. 22	Guan (?).
Figs. 16 and 17	Guan or muscovy duck.
Fig. 12	Muscovy duck.
Fig. 11	Duck.
Figs. 13 and 14	Hawk.
Fig. 23	Flamingo.
Figs. 24 and 25	Owl.
Fig. 21	Bird of prey.

BIRDS AND REPTILES (PL. 49)

Additional whistles, some in the form of birds (for the most part unidentifiable), others mainly as reptiles, appear on plate 49.

Figures 5 and 9 are purchase specimens. The former is very similar to a specimen in the Batres collection from the Papaloapan Basin (Batres, 1908, pl. 51). It is supposed to represent a crocodile. The clay is of the rough, rust-red variety and the entire upper surface and sides of the specimen are coated with asphalt.

Figure 3 is both whistle and rattle. It is made of cream-colored clay and covered with white slip.

Figure 16, although incomplete, looks suspiciously like an Ulua Valley type of figurine consisting of an animal supporting another of the same kind. Lothrop (1926, vol. 2, pl. 191, fig. *f*) found such figurines in Costa Rica and considered that they had been imported from Honduras.

THE COATI-MUNDI AND UNIDENTIFIED FORMS (PL. 50)

Among the animal-form tripod whistles the coati-mundi is a favorite theme. Like the bird forms, it occurs both in crude technique, made of coarse red clay, and in more realistic expression, made of smooth yellow or pink clay. There is a wide range of sizes, but small specimens are less common than large ones.

Redfield (1936), in an interesting study, identifies the coati with festal buffooning. It is well represented in collections from the Tuxtla region. (Seler, 1908–23, vol. 5, pl. 48; Seler-Sachs, 1922, pl. 18 (4),

p. 14.) Moreover, as in the case of the bird-form whistles, there are parallels in the material from Uaxactun (Ricketson, 1937, p. 216, fig. 140, *c*), although in the latter the eyes take the form of slits, as in the human figurines, rather than the circular pit-form which predominates at Tres Zapotes. It is, however, probably worth while to observe that Tres Zapotes specimens which do have eye slits (fig. 7, pl. 50, for example) are of the rough red clay and presumably earlier than the others.

Figures 8, 9, and 10 have not been identified. Figure 8 is the spout of a vessel; it is a particularly fine example of modeling. Figure 9, also, is a pottery fragment.

MONKEYS AND MISCELLANEOUS MAMMALS (PLS. 51, 52)

In plates 51 and 52 are shown miscellaneous figurines representing mammals. Plate 51 is devoted exclusively to monkeys. The more crude, solid specimens, like figures 1, 2, 5, and 9, are made of the same clay as the figurines of plates 1–14 and appear to be closely associated with the latter. Hollow specimens like figures 20 and 21, on the other hand, tie in with the Yellow and Pink wares of Upper Tres Zapotes.

Tripod whistles of the form of figure 16 are reported from the vicinity of Alvarado (Batres, 1908, pl. 38, fig. 2), whence come, also, specimens more or less like figures 18, 22, and 23 (Batres, 1908, pl. 38, fig. 2). Figures 20 and 21 probably reflect Mayoid influence, but, for the most part, the artists of Tres Zapotes seem to have handled the monkey theme in their own way. While no monkeys are to be found today in the immediate vicinity of Tres Zapotes, very old residents recall the time when there were monkeys on the Tuxtla Mountain, and they are still to be found on San Martín.

The assortment in plate 52 includes dogs, coatis, wildcats, and "tigers." Probably all are whistles. A specimen in the Seler-Saville collection of the American Museum of Natural History that is almost identical with figure 20 comes from Xoxo, near Monte Albán, State of Oaxaca.

TUBULAR INSTRUMENTS (INCLUDING A PANPIPE) (PL. 53)

We have in plate 53 a collection of wind instruments in the Pink and Yellow wares described in connection with surface burial pottery. Many of them, perhaps originally all, were white-slipped. The simple tubular forms are frequently adorned with the head of a bird. Figure 1 shows the head of a vulture; figure 2, that of a condor or an eagle; figure 3, an eagle.[15] In figures 8 and 12 the heads are probably those

[15] Identification by Charles E. O'Brien, ornithologist of the American Museum of Natural History.

of a guan and a goose, respectively, while, in figure 11, the effigy is human.

Of extraordinary interest is figure 13, since this is really a panpipe. So far as we have been able to ascertain, this is the first and only instance that a panpipe has turned up anywhere in North America.

Double tubular instruments similar to figure 16 have been found at San Andrés Tuxtla (Batres, 1908, pl. 44, fig. 2).

Many of the instruments shown here are provided with a pellet of clay to create a warbling effect when blown.

PART 3. MISCELLANEOUS CERAMIC MATERIAL AND WORK IN STONE

SPECIAL POTTERY AND FIGURINE FRAGMENTS

EFFIGY HANDLES (PLS. 54, 55)

The crude monkey, jaguar, bird, human, and other effigies shown in plates 54 and 55 are the lugs of large, shallow, flat-bottomed dishes made of rough, sandy, cream-colored or rust-red clay. The coarse texture is particularly evident in plate 55, figure 10. Occasionally, as in plate 54, figure 9, the surface is smooth and has received a reddish-brown slip.

In some cases, as in certain Teotihuacán vessels, the lug is placed on the inner side of the rim (for example, pl. 55, fig. 5), while in other cases (such as pl. 54, figs. 5 and 6) it is on the outside.

Seler (1908–23, vol. 5, pl. 47) shows specimens somewhat like plate 54, figures 6 and 7, from San Miguel Amontla and Santiago Ahuitzotla. For specific resemblances, however, one must confine himself to the Tuxtla region (Seler, vol. 5, p. 495, abb. 133 and 134; also, Seler-Sachs, 1922, pl. 8 (4), p. 13). The San Andrés Tuxtla specimens Seler calls inner handles of the incensario covers ("innere Griffe von Rauchergefassdeckeln"). Our Tres Zapotes specimens, however, as already indicated, come from vessels which appear to have served in their own right, rather than as the covers of other vessels, and there is no evidence that these vessels functioned as incensarios.

EFFIGY NECKS (PL. 56)

Three principal wares are represented among the effigy necks shown on plate 56:

(1) Speckled ware, of which figure 4 is an example. (We have already pointed out that vessels of this form and mode of decoration are quite characteristic of Upper Tres Zapotes Speckled ware.)

(2) Reddish-Brown Slipped ware, the clay of which is orange. Figures 2, 6, and 8 are examples, all of which have the face of the effigy blackened with asphalt.

(3) White-slipped ware, the clay of which is cream-colored or brown and has a smooth chalky consistency. Figures 10–15, exclusive of 14, are examples.

Crude effigies of this sort, varying in details from place to place, are so common that one cannot very confidently use them as clues to cultural contact. A few examples may, nevertheless, be noted from

areas where other more convincing parallels occur. From a mound at Santa Rita, British Honduras, comes an egg-shaped tripod vase on which is modeled an effigy suggestive of those shown here, although the eyes differ completely in that they are of the coffee-bean type (Gann, 1918, pl. 11). Better examples have come from Ulua Valley (Gordon, 1898, pl. 7, *r*) and from Uaxactun (Ricketson, 1937, pl. 76, *b*). Then, as might be expected, specimens almost identical with some of those shown here have turned up at San Andrés Tuxtla (Seler, 1908–23, vol. 5, pl. 48, particularly the specimen in the lower left-hand corner of the plate).

SCULPTURED POTTERY (PL. 57)

The sherds and bowl fragments shown on plate 57 are among the most interesting specimens of Tres Zapotes pottery. They come principally from the lower levels of the deposit in the vicinity of Mound D of the Ranchito Group at a depth of approximately 3 m. (See map 7.) They are, for the most part, manufactured out of smooth, untempered, yellow or cream-colored clay, although a few, such as figures 14 and 17, are dark gray or black. Some specimens—for example, figure 11—show traces of white slip. These are Totonac characters (Spinden, E., 1933). Moreover, while specific resemblances are hard to find, certain features of these specimens are highly reminiscent of sculptured stones at El Tajín. Compare, for example, the furled appendages of figure 16 with the similar design elements on the stone block called by Palacios and Meyer (1932, Fotografía No. 2) Banco S1, or with the leaves of the "tree of life" (Palacios and Meyer, Dibujo 12).

Going farther afield, we find that the representation of feathers in figures 13 and 17 has its counterpart in specimens from the Ulua Valley (Lothrop, 1936, p. 144, fig. 3) and, to an even greater extent, in material from Piedras Negras (Butler, 1938, pl. 1, No. 4). One of the Ulua specimens shows a human figure wearing as a pendant a human head very similar in conception to that which appears in figure 18. Note the flattened, receding forehead both in this figure and in figure 19. This feature and the paneling seen in figure 18 give these two specimens a strongly Mayoid flavor. The general style and technique of figure 12 resemble to a marked degree a specimen from Copán (Lothrop, 1936, fig. 1, *e*). Finally, it may be noted that the design in figure 9 is at least vaguely suggestive of the serpent numerals of the Dresden Codex (Morley, 1915, pl. 32).

Despite the various parallels cited, however, there can be no doubt, in view of the thousands of other sherds of identical clay and firing found at Tres Zapotes, that these sherds are all of local manufacture. Lothrop (1936) has pointed out that sculptured pottery of the kind shown in figures 12–19 was already being manufactured by the Old

Empire Maya, that it has a wide distribution, and that it may have had a northern origin. Its occurrence at Tres Zapotes is by no means exceptional for the Tuxtla region. At several places in this area, notably at Talocapan and Poyinapan, Lic. Juan Valenzuela[16] and his colleagues of the Museo Nacional de Arqueología, Historia y Etnografía of Mexico, working in collaboration with the Carnegie Institution of Washington, obtained such sherds in considerable abundance. The precise time level of this material in the Tuxtla region cannot be definitely stated as yet, but associated finds at Tres Zapotes suggest late Toltec times.

AN EFFIGY VESSEL, A FIGURINE, AND A MASK (PL. 58)

The large, hollow, baby-faced figurine (pl. 58, fig. 1) is a purchase specimen said to have been found in the Arroyo. It is made of a very light-colored clay and had a white slip. It measures 27 cm. in height.

The death mask (fig. 2) is a type of figurine of wide distribution in Middle America. A specimen reported by Gann (1918, p. 122, fig. 70) differs but slightly from this one in that it lacks eyebrow ridges, nostril openings are indicated, and flanges occur at the sides of the head and are perforated as though for suspension. A specimen from Teotitlán del Camino (State of Oaxaca), figured by Danzel (1922, vol. 2, fig. 61), is a closer approximation to the present one. Of greatest interest, however, is an example published by Vaillant (1936, Panel 2, bottom row, 3d fig.) as typical of middle Toltec times, a specimen distinguishable from ours only by a somewhat narrower face and less pointed chin.

The black effigy vessel representing a woman (fig. 3) was found in the northern half of Mound A of the Ranchito Group at a depth of 2.6 m. It contained a piece of an infant's skull.

MISCELLANEOUS VESSELS, SHERDS, AND POTTERY OBJECTS (PL. 59)

Figures 1 and 2 of plate 59 are white-slipped vessels from the layer of the surface burials at the Ranchito site. Vessels very similar to figure 1, except that the neck is taller and the spout handle is joined to the neck of the vessel by a horizontal bar, have been found at the Hacienda de San Francisco, near the Gulf Coast directly north of Tres Zapotes (Batres, 1908, pls. 3, 4). In the latter case, traces of a painted design overlay the white slip.

Figure 3 represents an object of unknown function.

Figure 4 is a pipe from the purchase collections, the only one seen during the entire season's work. It is quite similar to a specimen in

[16] Private communication, July 9, 1939. Note also Seler-Sachs, 1922, pl. 6 (2).

the Huaxtec collection at the American Museum of Natural History (Stout, 1938, pl. 3).

The incensario (fig. 5) is a purchase specimen from Saltillo, near San Juan, a few miles north of Tres Zapotes. It is of the same Rust-Red, rough ware as the bowl shown in figure 25, *f*. The inside of the high annular support is smoke blackened.

Figure 6 is a sherd of Yellow ware. The face may be a representation of Xiuhtecutli, the fire god. At Matacanela, in the Tuxtla region, Blom and La Farge found a large stone box decorated with the same circular elements as those which surround this face (Blom and La Farge, 1926–27, vol. 1, p. 24, fig. 24), as well as a round stone altar having both the circular elements and the vertical rays seen here (Blom and La Farge, 1926–27, vol. 1, p. 25, fig. 26). From this we may conclude that the sherd in question is not foreign to Tres Zapotes, and that the effigy had a religious significance for the people who made it. A statue of Xiuhtecutli in the Naturhistorisches Museum in Vienna supports a fire bowl decorated with alternating groups of circles and rays in the same row (Fuhrmann, 1923, fig. 15).

The effigy-bowl neck of Black ware seen in figure 7 has a close parallel in a specimen from Etla, State of Oaxaca, on exhibit in the American Museum of Natural History.

Figures 8 and 9 are incised sherds of dark Gray ware.

Figure 10 is of orange clay with cream-colored slip, through which the design has been incised.

Figure 11 shows part of an incurved, carved bowl with white slip.

Figure 12 shows the handle and part of the rim of a shallow bowl of the unslipped, sandy, Cream ware so abundant at the Ranchito site.

MISCELLANEOUS EFFIGIES (PL. 60)

Plate 60 shows a number of highly realistic, white-slipped effigies, all of them hollow. They include "tiger," dog, and monkey heads, a turtle, the paw of a jaguar, the leg of a crouching human figure from the wall of a vessel, and part of a mask, perhaps of the Old God.

No specimen is more finely executed than the turtle, which came from Mound C of the Ranchito Group. It contains pellets of clay permitting it to be used as a rattle. Incidentally, turtle shells of clay, painted white and used as musical instruments, are listed by Noguera (1937, p. 4) as one of the characteristic objects excavated at Tizatlán, Tlaxcala, and it is of interest to note that he equates the Tlaxcaltec pottery of Tizatlan with the beginnings of Mixteca-Puebla culture at Cholula, a time level which fits in very well with most of the Upper Tres Zapotes material.

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LIMB FRAGMENTS OF JOINTED AND LARGE HOLLOW FIGURINES (PL. 61)

While an occasional specimen in plate 61, like the one at the end of the second row, can be identified as belonging to some type of figurine for which we have complete representatives, already discussed, the majority occupy an anomalous position in this collection for the reason that the type of torso to be expected in association with them is entirely missing.

For instance, the specimens in the first row are presumably the limbs of the well-known Teotihuacán type of figurine with movable joints. But such figurines, or dolls, have a small, flat, triangular torso (Spinden, 1928, fig. 57, p. 178). No such torsos have been found in the excavations at Tres Zapotes. The same thing holds true for the Seler collection from the canton of Tuxtla (Seler-Sachs, 1922, pl. 10 (6), p. 24). This is indeed odd, and it is hardly to be accounted for by the supposition that torsos have all been reduced to unrecognizable fragments, for the limbs of such figurines would certainly be more susceptible to breakage than the torsos. Can it be that visitors to Teotihuacán from the Tuxtla region made a practice of picking up these limb fragments as souvenirs? Or is it rather that the torsos were simply overlooked by workmen trained to concentrate on rim sherds and heads? The latter hypothesis seems unfortunately the more likely.

In the case of the large hollow arms, and hands with the nails realistically represented, extensive breakage before the advent of the archeologist may plausibly explain the absence of other parts. Both the filleted ornaments and the manner of showing the nails recall figures of the Zapotecan funerary urns, which in the Valley of Oaxaca happened to be preserved for us by reason of the fact that they had been placed in tombs (cf. Danzel, 1922, p. 58).

MISCELLANEOUS CLAY OBJECTS

SEALS (PLS. 62, 63)

Among the flat seal fragments of plate 62, most of the specimens are of orange-colored clay, a few are cream-colored, and one, the bird effigy, is dark gray. In the column at the left side of the plate, the third specimen from the bottom has a cream slip over orange-colored clay. Occasional specimens have a reddish-brown slip.

The bird effigy is very like that seen in a double bird-head design on a flat seal from the Ulua Valley (Ries, 1932, p. 447, fig. 12). The curious 8-like figure on the seal immediately below it has been taken by Spinden as a symbol for 7, or the god No. 7; it is identical with a fragment from Tabasco (Blom and La Farge, 1926–27). The circular seal with spiral design suggests one with similar design from Teotihuacán (Peñafiel, 1900, pl .10), while the large square fragment near the bottom of the plate is typically Aztec in style.

Of the cylindrical seals shown in plate 63 all are of coarse red clay except the middle specimen of the second row, which is of coarse cream-colored clay. The specimens in the upper left- and right-hand corners show traces of white slip. The flat seal fragments near the lower right-hand corner are cream-colored and dark gray, respectively.

The "danzante" seal (lower left corner), one of the most significant specimens obtained, has already been discussed (p. 82).

The middle specimen of the third row is really a sherd of stamped pottery, rather than a seal. Being flat, it suggests the stamped bottom of an Aztec Period I vessel. Strebel (1885–89, Band 1, table 4, No. 53) shows a similar specimen in his Ranchito de las Animas collection. However, stamped pottery in this general style has a very wide distribution. The material from Mound 36, Copán, on exhibit at the Peabody Museum of Harvard University, includes sherds of stamped pottery exhibiting designs of precisely the same sort, although these appear in rectangular panels with rounded corners on the walls of the vessels instead of on the bottom. The sherd shown here is a purchase specimen recovered from the arroyo. The clay is coarse and cream-colored.

The middle specimen at the top of the plate, unlike the other cylindrical specimens, is hollow and has two perforations.

SPINDLE WHORLS AND BEADS (PL. 64)

We have in plate 64 a representative collection of spindle whorls and clay beads. The spindle whorls take the following forms:

a. Truncated cones.
b. Spherical slices.
c. Bell shapes.

They may be plain, or they may exhibit incised, carved, or modeled decoration. Two specimens, not photographed, were decorated with human figures, one of which wears an elaborate headdress. Spindle whorls occurred frequently throughout both surface and deep burial levels on the Ranchito site.

Two additional specimens and what appears to be a mold used in making spindle whorls are shown in figure 52 (p. 83).

EAR SPOOLS, RINGS, AND BEADS (PL. 65)

Miscellaneous clay objects, principally ear spools, rings, and beads, make up the collection shown on plate 65. Both spherical and tubular beads are represented.

Conspicuous specimens are the little disk with relief modeling of a frog and the ring made up partly of a monkey's head, both sufficiently unique to be claimed by the Museo Nacional of Mexico.

The dark-gray or black, grooved, spherical objects in the lower right-hand corner were abundant in the excavations on the Ranchito

site, especially in Mound F. We took them to be ear ornaments, but it is the opinion of Mr. Eduardo Noguera that they are weights used to sink fishnets. Certainly they would be well adapted to such a purpose. Whether the object in the lower left corner is in the same category remains problematical.

WORK IN STONE

STONE YOKES

Fragments of stone yokes were fairly abundant at Tres Zapotes. Of the 15 recovered, 11 had ornamental carving while 4 were plain. All of the yoke fragments excavated were from the Ranchito site and from the adjacent First Terrace site. Both the open and closed varieties were present.

Three of the closed examples (pls. 66, figs. 8, 14; 67, fig. 1) and a fourth (pl. 66, fig. 4) which may have been closed, were excavated in a small mound at the east edge of the Lower Terrace site and were in association with Upper Tres Zapotes ceramic material, including laughing-face figurines. The decorated pieces from the Ranchito site were with Middle Tres Zapotes ceramics. The implication is that the decorated, open type of yoke may have been somewhat more early than the plain and the closed yokes. One complete carved example was obtained from a milpa near Lirios (pl. 67, fig. 1). The sherds on this site were of Upper Tres Zapotes, or "Lirios" type. A similar incomplete example (pl. 68, fig. 1) was found at a site at the foot of Cerro Chico Zapote about 2 miles southeast of the Tres Zapotes locality. All of the specimens were of hard, decorative stone with the exception of a single example from the Lower Terrace mound, which was of vesicular lava (pl. 66, fig. 4).

METATES

Three complete metates were found, all associated with Middle or Upper Tres Zapotes material (pls. 67, fig. 2; 66, fig. 5; 68, fig. 13). These are of one basic type, with tripod support consisting of two legs at one end and a supporting ridge at the other. Two are made of basalt and one of fine-grained sandstone. All are of relatively small size. The mullers, made of fine-grained sandstone, are rather flat with rounded ends, the widest portion being in the middle (pl. 67, fig. 2).

STONE VESSELS

Fragments of three stone vessels were excavated at the Ranchito site. One of these was in the form of a "flower pot" with flat base and outward flaring sides (pl. 66, fig. 12). Another was a flat-bottomed bowl with a lug at the end (pl. 66, fig. 9). The third had evidently been a

flat ovate dish of hard fine-grained stone with a ridge or shoulder on the inner side of the rim (pl. 66, fig. 6).

Two complete vessels, made of lava, were obtained from Lirios. One (pl. 69, fig. 6) was roughly triangular in shape with flat bottom inside and out. The other (pl. 68, fig. 12) was rectangular with outward sloping sides.

STONE RINGS

Stone rings were abundant at the Ranchito site. Some were of basalt, some of vesicular lava, and some of sandstone. For the most part they were rather roughly formed. The perforations were generally in the form of cones meeting at the middle (pl. 70, figs. 5, 6, 7). A few examples were found with double perforations, meeting at right angles. Another variant consisted of exactly similar imperforate stones in which the depressions did not go completely through. These might be considered incompleted stone rings were it not for their relative abundance. A somewhat more elaborate stone ring made of granite in the form of a cogwheel was obtained from Lirios (pl. 70, fig. 4).

SLING STONES

So-called "sling stones" were also fairly numerous at the Ranchito site. These consist typically of a barrel-shaped stone, hollowed out so that one side of the barrel is modified into a loop handle (pl. 70, figs. 9, 10, 11, 12). Most of these were smooth and finished with considerable care. One specimen had the ends decorated with red paint. It seems likely that these were designed to be used for some "ironing" or smoothing operation.

HUMAN FIGURES

Small stone figures with comblike crests are characteristic of the region, but not a single one was found on the Tres Zapotes site. A few examples were obtained by purchase. Two of these (pls. 68, figs. 2, 3; 69, figs. 1, 2) came from the nearby Cerro Chico Zapote site and are made of basalt. One of these (pls. 68, fig. 2; 69, fig. 2) seems to be a large modified ceremonial celt. Another example skillfully carved from vesicular lava (pl. 71) was found on a site below Boca San Miguel.

A crudely carved seated figure (pls. 68, fig. 6; 69, fig. 3) with arms crossed on the breast was made from consolidated volcanic ash and came from Lirios. A stone skull with broken tenon attachment (pls. 68, fig. 7; 69, fig. 4) came from the mound on the Lower Terrace site, and was in association with the stone yokes from this mound.

MISCELLANEOUS STONE OBJECTS

Stone balls, as a rule somewhat larger than a golf ball, were very abundant at the Ranchito site. Cylindrical, pestlelike stones, ranging

from a few inches in length to a foot and a half, were also abundant, usually in fragments. Rubbing stones of various sizes and shapes occurred by the score. Usually these were natural pebbles with a high polish on one side. Fragments of three stone "pounders" with flaring base and cylindrical handle were excavated at the Ranchito site (pl. 69, fig. 5).

Several bark beaters were found, ranging in shape from rectangular to oval (pl. 72, figs. 15, 16, 17). These were grooved around the outer edge. The ridges on the beating surfaces are typically finely spaced on one side and widely spaced on the other. The excavated specimens were associated with Upper Tres Zapotes ceramics.

Polished celts were relatively common (pl. 72). These are of hard fine-grained stone, usually having the butt end square or slightly rounded. One jade example was purchased (pl. 74, fig. 4).

The complete absence of stone "Hachas" and Palmate stones is worth mentioning.

MINOR STONE OBJECTS

An interesting polished greenstone human figurine with incised features was found in the arroyo near Group 3 (pl. 73, fig. 2). A double incised line crosses the forehead and similar double lines run across the waist and near the base. Three vertical grooves depend from the latter as though to indicate legs or feet. The arms are shown as crossed high on the chest.

In the earth and rubble which composed the core of the masonry platform near the east end of the long mound was found a polished flat head made from a hard and very fine-grained black stone. The head had been broken, presumably from a complete figure, and the break at the neck ground down and smoothed (pl. 74, fig. 1).

The upper part of the body of a jadeite figurine, minus the head, was excavated at the Ranchito site (pl. 74, fig. 5).

A nicely carved small parrot, of a hard yellow stone, perforated at the back of the neck, was said to have been found about a half mile north of Tres Zapotes (pl. 74, fig. 3).

JADE

Stone beads, usually of jadeite of inferior colors, were moderately abundant, especially at the Ranchito site (pl. 75). In the trench dug through Mound 6 associated with a burial was a single bead of translucent emerald green jade.

At various places in the diggings, particularly at the Ranchito site, were found small polished jade pebbles which were unperforated. A few tear-shaped pendants were also found (pl. 75, figs. 1, 3).

One finely perforated fragment of a reworked carved jade specimen was dug up on the Ranchito site (pl. 75, fig. 2).

Other jadeite specimens from the Ranchito site consisted of two fragments of pointed implements (pl. 75, figs. 15, 16), a carved dog's head, and several fragments of undecorated plaques (pl. 74, figs. 7, 10, 11, 12).

A jade celt and the fragment of a figurine torso have already been mentioned.

GALENA

A number of galena specimens were found at the Ranchito site. These were all roughly cubical in shape, and perforated by drilling two holes meeting in the center at right angles (pl. 76, figs. 1–5).

OBSIDIAN

Prismatic obsidian blades and cores (pl. 77) occurred abundantly throughout the site. Chipped projectile points and scrapers (pl. 78) were sparingly found. A few small projectile points with concave base and notched sides (pl. 78, fig. 4) were found on the surface. Larger stemmed points were excavated with Upper Tres Zapotes ceramics at the Ranchito site (pl. 78, figs. 1, 2).

Two lunate specimens (pl. 78, figs. 7, 8) were also excavated at the Ranchito site. One of these was formed entirely by flaking; the other had apparently been shaped by flaking and then ground smooth on both sides.

PART 4. SYNTHESIS

PROBLEMS

The material which has been presented is bound up with a number of crucial problems in Middle American archeology and raises any number of questions—some of them necessarily controversial at this stage of inquiry. What degree of antiquity is implied in this material? Is there a genuine "archaic" component, or are we dealing with a case of "neoarchaic" survival in a marginal area, such as prevails in western Mexico? Was the culture of Tres Zapotes derived from a Q complex base? What light, if any, is thrown on the Olmec problem? What was the ethnic composition of the people who made the Tres Zapotes figurines? To what linguistic stock did they belong? Were they related to the people who practiced a figurine cult at Uaxactun before the erection of Pyramid E-VII Sub? What was their relation to the "archaic" peoples of the Valley of Mexico and their Nahuatlan successors of Toltec and Aztec times? To what extent did they influence, or were they influenced by, the Maya of Old Empire and Renaissance periods, the Totonac culture as exemplified at Cerro Montoso, the Mixteca-Puebla culture of Cholula? Can they be linked with Ranchito de las Animas? Do they, to any extent, bridge the archeological gulf which separates the Huaxtecs from the Mayas despite the linguistic affiliation of these two peoples?

These and many other problems challenge the student of Tres Zapotes ceramics at every turn. Many of them remain as baffling as they were before the excavations at Tres Zapotes were begun. Others can, for the first time, be answered with some degree of assurance, while still others, about which it has hitherto been idle to speculate, can now, at least, be made the subject of more or less plausible hypotheses.

DIFFERENTIAL FEATURES OF MIDDLE TRES ZAPOTES A AND B AND UPPER TRES ZAPOTES

Before tackling any of the problems just mentioned, it will be desirable to review the main stratigraphic features revealed by the excavations.

Middle Tres Zapotes A.—The pottery of this level includes four wares not found in other levels: Brown, Polished Gray, Red-and-White Incised, and Striated with white slip. The variety of vessel forms is considerable and includes the composite silhouette (fig. 4, *j*), which,

while not limited to this level, is perhaps significant because of its similarity to forms which are conspicuous in material of undoubted antiquity from other sites. Two-color decoration is unknown on this level except for the Red-and-White incised wire, and even in this case the two colors do not occur on the same surface, the red being limited to the interior, the white, to the exterior of the vessel. Incised patterns on Middle Tres Zapotes A sherds are invariably of a simple "freehand" type.

One of the wares of this level, highly Polished Red, occurs also in the upper levels of the Long Mound (C), of the Arroyo Group, but is everywhere absent from Ranchito material. This, of course, is understandable, when it is recalled that all Middle Tres Zapotes A material was obtained within the Arroyo Group, and that soil containing debris of this level undoubtedly went into the building of Mound C.

All figurines of the Middle Tres Zapotes A level belong to the solid hand-made category. Tres Zapotes types are in the majority, but Uaxactun and Morelos types also occur on this level.

By what span of time Middle Tres Zapotes A material antedates that of Middle B and Upper Tres Zapotes it is impossible to state, but the relative depth at which it was found and the circumstance that, in the Plaza of the Arroyo Group, it is separated from Upper Tres Zapotes material by a sterile deposit approximately 6 feet thick leave little doubt that it is earlier than any other ceramic material found by us during the first season.

Middle Tres Zapotes B.—On this level Speckled ware (derived possibly from Middle Tres Zapotes A Striated) becomes prominent. There is considerable elaboration of form and design. New decorative techniques are introduced—notably, multiple scratching with red paint rubbed into the scratches, and deep incision with sharply delineated geometric designs. The first evidences of painted design appear. Effigy handles are common. Huge ollas containing uncremated burials and very large cylindrical storage jars are salient features. Sculptured sherds in the Maya tradition and fragments of carved stone yokes occur in the deepest part of this level. Tres Zapotes figurines continue to be abundant, and the finding of one such figurine carefully placed inside the innermost vessel of one of the burials suggests that they still retained symbolic value. Xipe heads, figurines of Teotihuacán type (pl. 38), and the limbs of jointed dolls further complicate the picture.

Upper Tres Zapotes.—In the pottery of this level we encounter an amazing diversity of vessel form. Cremated burials in ollas covered with tripod bowls (Rust Red, rough ware) having loop-handle supports, and often hobnail ornamentation (fig. 25, *f*), may be considered diagnostic of the level. The decorative techniques of Middle Tres

Zapotes B are retained and given great freedom of expression, some of the designs being quite complicated and no two of them alike. In addition, color is extensively employed, ranging all the way from simple dichrome devices to full-fledged polychrome patterns in four colors. Two new groups of figurines appear: Mayoid mold-made forms of the general type characteristic of Campeche and Tabasco, and so-called Totonac laughing figures of notable size.

Q COMPLEX ELEMENTS

When the entire body of Tres Zapotes material is considered, a fairly large number of Q complex elements are seen to be present. Spouted vessels and effigy vessels are both common. Shoe-form vessels were not found in the first season's work, although one specimen did turn up in the second season. It cannot be stated with certainty that the tetrapod support occurs, but the form shown in figure 50, *b*, is quite similar to that associated with tetrapod vessels from other areas. Elongated tripod legs are missing, but high annular bases occur occasionally, and slipped hand-made figurines are not uncommon. Some of the Dichrome sherds exhibit negative painting, and, as for crude stone monuments, they are very prevalent throughout the Tres Zapotes archeological zone.

It is apparent, then, that about two-thirds of the Q complex traits are represented. In spite of this, one can hardly argue that the Q complex is the substratum underlying Tres Zapotes culture, for, of the various traits enumerated, only one—slipped hand-made figurines—has been found on the Middle Tres Zapotes A level. The others have all been found under conditions which do not imply great antiquity. To be sure, the amount of Middle A material so far recovered is exceedingly small, and details regarding the more recently discovered Lower Tres Zapotes are not yet available. More extensive excavation and new data may reveal other Q complex traits on early levels, but meanwhile one can only guess the possible role of the Q complex in the genesis of Tres Zapotes culture.

THE ARCHAIC QUESTION

As set forth by Lothrop, figurines qualify as "archaic" in the sense in which this term is used by Spinden, when they satisfy the following criteria:

(a) Modeled in a flat gingerbread fashion (i. e., solid) and with details added by buttons and fillets to a gross underlying shape.

(b) Modeling and shaping being done with fingers, molds being unknown.

(c) The heads are characteristically of slight depth compared with their height.

(d) When the figurines are intended to stand erect, as is often the case, the feet are pinched downward into a forward and backward cusp.

(e) The eyes are formed by characteristic grooves or double grooves, which are usually cut in buttons of clay, resulting in the so-called "coffee-bean" eye. [Lothrop, 1926.]

Except for the "coffee-bean" eye, the figurines which we have designated as of archaic type in the present study meet all the requirements of these criteria. Some of the specimens shown in plate 21 have eyes approximating the "coffee-bean" type, although the two halves of the eye are separated by a vertical groove, rather than by a horizontal one, as is ordinarily the case. At any rate, the precise type of eye called "coffee-bean" is apparently not an absolutely essential criterion. Hence, if we accept the five criteria given, we are justified in applying the term "archaic."

This term, however, implies an antiquity comparable to that of Uaxactun I and Monte Albán I or, at least, an age not later than that of the Cuicuilco–Ticomán cultures. The question arises as to whether the Tres Zapotes material actually indicates such antiquity, or whether it indicates a late overflow of archaic elements into a marginal area where they underwent subsequent elaboration over a long period of time and remained functionally alive for centuries after the decline or disappearance of the mother cultures from which they were taken. The second view is precisely that taken by Dr. Spinden himself after cursory inspection of the photographs.

It may be of some value in attempting to decide this question to examine first the percentages of the various figurine types included in the general category Archaic. These are given in the tabulation which follows:

Solid Hand-made Figurines

Type	*Percent*
Classic Tres Zapotes	47.0
Vaillant's Type A	19.5
Grotesque	10.0
Transitional	5.5
Baby-faces	1.2
Morelos types (pls. 20, 21)	2.8
Uaxactun type (pls. 16, 17)	3.0
Miscellaneous	11.0

It is evident from these figures that 82 percent of the solid hand-made figurines of Tres Zapotes, plus an undetermined percentage within the group designated as miscellaneous, belong to a common artistic tradition. We have shown that Vaillant's A Type is an integral part of this tradition. In the Valley of Mexico this type is regarded as intrusive, yet here it makes up more than a third of the main bulk of locally specialized figurines. The conclusion seems inescapable that the Tres Zapotes area, if not Tres Zapotes itself, was the place of origin of Type A figurines. But if they appear in the Valley of Mexico on a late Copilco-Zacatenco horizon, as Vaillant (1930) has

demonstrated, then they must have been manufactured at Tres Zapotes at least as early as that period, and their claim to "archaic" antiquity is validated.

This claim is further substantiated by the fact that they are found on the Middle Tres Zapotes A level in close association with early Uaxactun and Morelos types—types which can hardly be expected to have migrated after the cultural complexes in which they had their original setting had ceased to function. Moreover, they themselves (or a close counterpart, similar even to being red, rather than white-slipped) occur in Period I deposits at Uaxactun.

Again, the occurrence on the Middle Tres Zapotes A level of Polished Gray ware reminiscent of Monte Albán I and of decorative techniques quite similar to those of Monte Albán I and II lend additional weight to this thesis. Nor can we forget the Cocijo figurine of definitely early type, or the danzante figure of the cylindrical seal, not to speak of Stela C with its mask and Baktun 7 date.

On the other hand, we would not deny that many of the "archaic" traits—including, especially, the figurines—survived at Tres Zapotes well into Toltec times, or even later. In giving the differential features of Middle Tres Zapotes B, we called particular attention to evidence of such survival.

THE OLMEC QUESTION

The researches at Tres Zapotes contribute little toward unraveling the mystery which surrounds Olmec civilization. Olmec art at Tres Zapotes is represented by the early Cocijo figure and by baby-faces, as well as by the Cabeza Colosal and the mask of Stela C. Baby-faces make up a smaller proportion (a little over 1 percent) of the solid hand-made figurines than either the Uaxactun or Morelos types. They do not appear to have been manufactured at Tres Zapotes, and it is suggested that they may have been imported from Honduras. Yet obviously neither the Cabeza nor the now famous stela can have had any but a local origin, and stone sculptures of such magnitude imply a settled population. One thing which stands out in connection with Stela C is the association of an Olmec mask with an initial series date, a circumstance linking Olmec with early Maya perhaps more strongly even than do the "Olmec" masks of Pyramid E-VII Sub at Uaxactun. Finally, in our study of the figurines a case has been made for the probable evolution of both the "Totonac" laughing face and one of the best known types of Maya figurine from the Olmec baby-face. That the baby-face really symbolized a deity seems to be implied by its use as part of the regalia of much more sophisticated figures. We see it, for example, as part of the girdle ornamentation of the figure on Stela 13, Piedras Negras

(Spinden, 1928, pl. 19) and as an element in the headdress of a large clay figure from San Andrés Tuxtla (Batres, 1908, pl. 46).

RELATIONS WITH THE MAYA OLD EMPIRE

Analysis of the pottery of Tres Zapotes has revealed numerous similarities in vessel shape, rim form, form of support, and design with the ceramics of Old Empire Maya sites, notably Uaxactun, the Ulua Valley, Copán, San José, British Honduras, and Piedras Negras. Of particular value in this respect have been the sculptured sherds, because of their unmistakable identity. At least one type of figurine, discussed in the commentary on plate 37, was traced to primitive Maya sources. Taken in connection with the seventh cycle date of Stela C, these various bits of evidence leave no doubt that intimate cultural relations existed between Tres Zapotes and what has been called the Maya Old Empire.

What was the nature of this contact? Some will no doubt argue that Tres Zapotes is part of a marginal area which received Maya Old Empire influences at a relatively late date and kept them alive long after the break-up of that "empire." Again, as in the case of the "archaic" traits, we would not deny the possibility of such survival, but the assumption that genuine Maya influence did not begin to be manifested here until toward the close of the Old Empire period appears to us unwarranted in the face of some of the facts. Dr. Caso has demonstrated by refined photographic technique that the initial series of Stela C is indeed a Baktun 7, and not a Baktun 9, date, and Mr. Stirling's arguments for the contemporaneity of this date have not yet been refuted. These facts alone should make one hesitate to rule out the possibility of early contact. In fact, when one considers the proximity of Tres Zapotes to Old Empire sites and the enormous distances over which Middle American traits sometimes diffused (for example, the pear-shaped vessel with high annular base, which Lothrop (1926) traced from Veracruz to the Pacific area of Costa Rica and Nicaragua, and the Cholula and Cerro Montoso designs which turn up in Ecuador and Peru), it seems incredible that isolation could have prevailed.

The matter of Maya origins is still a moot question. Little light has been shed upon it by excavations in the known Maya area. The location of the Huaxtec, speaking a kindred language, makes very tempting the hypothesis of a coastal migration from the north, although, actually, the general southward drift which populated South America may, for all we know, have reversed itself in this region by the time incipient Maya culture came into being. Be that as it may, it is difficult to imagine a more favorable region than the Tuxtla region for the development of agriculture. Here the rain gods

are much less capricious than over the Valley of Mexico, and people from the latter region are known to have migrated at various times to coastal areas under pressure of famine. In the light of recent conceptions of the origin of agriculture in America one might more readily believe this to have been a place of origin than the Valley of Mexico. Moreover, it is abundantly supplied with fish and game. It is entirely logical, therefore, to seek the roots of Maya civilization and even of the Middle Cultures in precisely this region, and it may become necessary, in the future, to shift emphasis in research away from the classic Maya area into this one. What has so long been regarded as a peripheral (marginal) area on the receiving end of the cultural transmission line may turn out to be a center of dissemination.

RELATIONS WITH THE MAYA RENAISSANCE

Large, hollow, mold-made figurines more or less similar in type to those which have been found on the Island of Jaina, in the States of Campeche and Tabasco, and even in some parts of the State of Veracruz are well represented at Tres Zapotes, showing decided late Maya influence. These richly costumed figures are restricted to the Upper Tres Zapotes level and must therefore have arrived at a much later date than the Old Empire traits just discussed. Mrs. Spinden (1933) places such figurines in the State of Veracruz on the same time level as Cerro Montoso pottery; that is, about 1300 A. D. But at Tres Zapotes the salient features of Cerro Montoso pottery, as we shall see, are absent. Does this mean that Maya elements in the art of Tres Zapotes were not so "long dormant or delayed in transference" as Mrs. Spinden suggests and hence came into manifestation here before Cerro Montoso attained full efflorescence, or does it mean that Tres Zapotes, as a center of Maya renaissance, had, by the year 1300, attained such artistic and political vigor that it was able to withstand any inroads from the Mexican highlands? It does not seem possible to answer these questions at present.

RELATIONS WITH TEOTIHUACÁN

Numerous traits have been cited which link Tres Zapotes with Teotihuacán. Among them may be mentioned especially a particular type of figurine (pl. 38), the limbs of jointed dolls, finely modeled masks of the Old God (pl. 39, figs. 4–7), the "candelero" (fig. 50, *e*), and effigy handles (pls. 54 and 55). The majority of these traits may be regarded as borrowed. This may not be true, however, of the effigy handles, since these are so abundant, not only at Tres Zapotes, but throughout the Tuxtla region, as to suggest this region as their place of origin. The Teotihuacán culture does not appear to have exerted any considerable influence on the pottery of Tres Zapotes.

RELATIONS WITH TOTONACAPÁN

Totonacapán, or the territory of the Totonacs, lies to the north of Tres Zapotes. The three sites in this territory which have been most extensively studied from the point of view of ceramics are Ranchito de las Animas, Cerro Montoso, and El Tajín.

With the pottery of Ranchito de las Animas, that of Tres Zapotes shares a number of characteristic traits. The assortment of Dichrome combinations is about the same in the two places. At Ranchito de las Animas white is the base color to which other colors are then added. There is abundant evidence that this was also the practice at Tres Zapotes. The ware which we have called Pseudodichrome occurs at Ranchito de las Animas, but Strebel (1904) believed that the unslipped part of the surface had originally held a white slip which subsequently wore off, while the design in a different color was retained. Few of the vessels of Ranchito de las Animas have supports, and when they do, they are of simple form, never effigies. In this connection, it should be noted that not a single vessel from the Tres Zapotes deep burials has feet. At both sites simple geometric designs predominate.

With Cerro Montoso there is far less in common. Human and animal-head foot-forms, an outstanding feature of Cerro Montoso pottery, do not occur at all in the Tres Zapotes material. Spirals, steps, and meanders, so common at Cerro Montoso, occur sparingly here. Animal figures (barring an occasional rabbit), death's heads, smoke curls, and sun rays—all of them characteristic design elements at Cerro Montoso and known from Alvarado all the way to Cuicatlán, Cholula, and Tlaxacala—are entirely absent at Tres Zapotes. On the other hand, both the plain red malacates (spindle whorls) of Ranchito de las Animas and the malacates exhibiting relief carvings, often animal, of the Cerro Montoso type, occur at Tres Zapotes. Effigy handles similar to ours are found at Cerro Montoso (Strebel, 1885–89, vol. 1, pl. 11, figs. 7, 15, 18, 19, 20), but these probably date from late Toltec times.

Thorough comparisons with El Tajín are not possible, since the only comprehensive analysis of the pottery from this site (that of Du Solier) has not yet been published. It may be noted, however, that the forms shown in figure 33, Nos. 50, 51, and 52, occur abundantly in Polished Black ware at both sites.

Let us consider now some of the more general characteristics of Totonac pottery noted by Mrs. Spinden (in the work already cited) and see whether they apply to Tres Zapotes material. The Totonacs, remarks Mrs. Spinden, tended to depend on the beauty of the clay, using color for borders and design only. This observation is applicable to much of the Tres Zapotes surface burial material. Extensive

use of cream clay for the basic color likewise applies. Moreover, reference to our table giving the distribution of forms according to ware bears out the statement that Light Orange and Polished Black wares duplicate the Cream, although we should not have singled out these particular wares, since duplication at Tres Zapotes is far more extensive. In certain other respects the analogy breaks down. The use of brown, red, or black to duplicate the double-line feature of Totonac sculpture is not seen on the pottery of Tres Zapotes, nor are there any designs related to the palmate stones. The palmate stones themselves have not appeared at Tres Zapotes. Mrs. Spinden notes that the Totonacs favored low basins and large plates, while the Old Empire Maya preferred high narrow bowls. Both traits are seen at Tres Zapotes, but the former predominates.

A word should be said regarding the laughing faces. Mrs. Spinden observes that these belong to a series with both hands raised in identical posture which is traceable from northern Yucatan through the Tuxtlas to Cerro de las Mesas. If we understand her correctly, she implies that they are one of the Maya elements which influenced the art of Veracruz about the year 1300 A. D. The fact that these figures in museum collections are generally labeled "Totonac," however, suggests that most such specimens probably came from Totonac territory. In any case, the point which for us is most significant is that Tres Zapotes shared with both Yucatan and Totonacapán a major artistic form.

RELATIONS WITH ZAPOTECAN CULTURE

We have already pointed out, in other connections, the presence of traits at Tres Zapotes reminiscent of early Zapotecan culture: The Polished Gray ware and wide, everted, incised rims of Middle Tres Zapotes A, the scratched decoration with red paint rubbed into the scratches, the danzante seal, and the early Cocijo figurine. The deep geometric incisions of Monte Albán III were noted in our analysis of the general Ranchito collection, while the strongest evidence of all for direct contact between Tres Zapotes and the Valley of Oaxaca is the beautifully carved stone yoke with a perfectly executed Zapotecan glyph (Caso's C glyph (Caso, 1928)) discovered in the deeper levels of Mound F of the Ranchito Group. This glyph is one of the commonest to be seen on the headdresses of figures associated with Zapotecan funerary urns. Its presence here on a stone yoke, supposedly a Totonac trait and one never found in Zapotec country, beautifully symbolizes the interpenetration of the two cultures. We can, with reasonable assurance, declare that Tres Zapotes and the Valley of Oaxaca were in close contact culturally throughout the greater part of the long period during which the Zapotecs occupied Monte Albán.

RELATIONS WITH THE MIXTECA-PUEBLA CULTURE

These are far less obvious than those with the civilization of the Zapotecs. From the Archives of the Mexican Nation sporadic groups of Mixtec-speaking people are known to have settled in the Papaloapan Basin and to have been living there in historic times. It is quite possible that these were frontier groups who did not share extensively in the rich Mixteca-Puebla culture. They may have come into this region before the full flowering of that culture. It is interesting to recall, in this connection, that Ixtlilxochitl reported that the Mixtecs went south by sea in the sixth century and later moved up into the mountains of Oaxaca from the coast. Cerro Montoso is regarded as a type site illustrating Cholula (that is, Mixteca-Puebla) influence in the State of Veracruz, but, as we have seen, Tres Zapotes has very little in common with that site. Moreover, pitchers and skillet-form incensarios (except for a single fragment)—two salient features of Mixtec pottery in Oaxaca—are absent from the Tres Zapotes material. Zoomorphic supports and symbolic representations in Polychrome are missing entirely.

Nevertheless, one occasionally encounters a Polychrome dish which has a rather definite Mixtec flavor. Consider, for example, the specimen shown in figure 53. And then there are miniature vessels strikingly similar to the tiny specimens so abundant in collections from Etla, Xoxo, Cuilapan, Tillantongo, and Nochistlán in the State of Oaxaca. Six of these are shown in figure 54. May it be that the Zapotecs, after their displacement from Monte Albán and retreat toward the east, constituted a kind of buffer state through which Mixtec influence percolated only in attenuated form?

RELATIONS WITH THE HUAXTECA

Manifest cultural contact with the Huaxteca does not appear before the Uppre Tres Zapotes level. Here it is revealed in the Red-and-Black-on-Cream ware, of which the chili grinder (fig. 28, *d*) and the spouted vessel with strap-handle (fig. 27, *g*) are outstanding examples. Noguera figures a specimen from the Huaxteca which closely parallels the latter (Noguera, 1932). The Rough Red tripod bowls with loop-handle supports used as lids for the surface burials are very probably an importation from the Huaxteca. Dr. Vaillant is of the opinion that such bowls are still placed on graves in the Huaxteca at the present time.

AZTEC REMAINS

One might expect to find, in a region known to have been very much under the control of Mexico-Tenochtitlán, plenty of evidence of Aztec occupation in the form of artifacts, especially in a region where Aztec,

or Mexicano, was spoken in historic times. Yet such is not the case at Tres Zapotes. Except for a single figurine (pl. 40, fig. 14), a few flat seals, and one piece of stamped pottery of uncertain origin, we found no direct evidence of Aztec influence. How are we to account for this? Lothrop encountered the same situation in Nicaragua and ventured to explain it on the assumption that Aztec soldiers and merchants married native women, forming colonies which would naturally lack Aztec ceramic utensils. In this case, however, we know that the people of Tuxtla and Tlacotalpan paid tribute to Moctezuma. If so, they must have been regarded more or less as aliens by the people of Tenochtitlan, and the tribute which they paid probably guaranteed them the right to pursue their own arts and ways of living. The fact that they spoke Mexicano does not negate this argument, for it will be remembered that the early missionaries noted sharp dialectic differences between the speech of this region and that of the Valley of Mexico. Furthermore, recent students of the linguistic questions, like Prof. Wigberto Jiménez Moreno, of the Universidad Nacional of Mexico, report that modern communities in the Tuxtla region speaking Mexicano actually speak an archaic form of the language, the form which Lehmann designated Nahuat in contradistinction to Nahuatl. The writer was able to make the same observation in the case of a visitor to our camp who came from another village in the region. We may, therefore, suppose that the Nahuatlan groups of this region have been here for a very long time (that they had, in fact, been here for a long time when the Spaniards first arrived). They may well be descendants of the Toltecs. Their culture had plenty of time to develop along lines independent of the parent stock. These considerations would adequately account for the rarity of Aztec material remains at Tres Zapotes. Moreover, Tres Zapotes may well have been abandoned before the rise of Aztec hegemony.

GENERAL CONCLUSIONS

Tres Zapotes was the seat of a locally differentiated culture which flourished contemporaneously with at least some of the Middle Cultures of Middle America. During this early phase it influenced and was considerably influenced by areas to the south and east. The ties with the Valley of Mexico were probably not as strong, and, in relation to the latter region, Tres Zapotes was perhaps more donor than receiver. The fundamental characters of the early culture probably survived into late prehistoric times. Neither architecture nor the use of metal ever flourished (so far as present evidence goes) at Tres Zapotes. The former is understandable by reason of lack of stone building material, but failure to find a single scrap of metal in our excavations is a circumstance difficult to comprehend. Certainly it argues against late occupation.

Relations with the Maya were probably intimate throughout the entire history of that people. In the light of Stela C, it would appear that some of the early inhabitants of Tres Zapotes actually were Mayas or, if not, that they were a people who laid the foundations of Maya astronomy.

Relations with both the Valley of Oaxaca and Totonacapán are very evident well into Toltec times, but these relations become more tenuous from late Toltec times on. It is from the Huaxteca that the strongest late foreign influence at Tres Zapotes appears to emanate.

Curiously enough, early archeological relations emerge with greater clarity out of this investigation than do late ones, and it is to be regretted that more extensive correlations between archeology and history at this site are as yet impossible.

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APPENDIX

INVENTORIES OF REPRESENTATIVE BURIALS

DEEP BURIALS

Burial No.:	*Text figures*
R–2	8, *b*; 11, *d* and *e*; 12, *b*.
R–3	10, *c*; 11, *a* or *c*.
R–5	8, *a* and *d*; 11, *b*.
R–6	9, 15.
R–10	16
R–13	13, *b*.
R–18	7, *a*; 12, *a*.
R–25	7, *b*,
R–27	7, *c* and *d*; 13 *c*.

SURFACE (CREMATION) BURIALS

Burial R–1.—Several small bowls of very thin Yellow ware, one within the other. One had an elaborate, delicately incised, geometric design around the outside just below the rim. The innermost and smallest of the vessels was the tiny bowl with the incised figure of a man shown in figure 29, *e*.

Burial R–11.—The large spouted vessel with strap handle and painted decoration shown in figure 27, *g*, which was filled with charred bones and covered by the vessel shown in figure 19, *c*, inverted over its principal orifice.

Burial R–12.—The beautifully painted and incised vessel shown in figure 18, *b*, filled with charred bones and covered by a shallow bowl of Yellow ware having a faint white slip.

Burial R–14.—An olla bowl full of cremated bones and covered with an inverted dish (similar to figure 17, *a*) having a diameter smaller than that of the orifice of the olla bowl.

Burial R–15.—Similar to R–14.

Burial R–16.—Olla bowl in which was set the thin Yellow ware bowl with corrugated wall shown in figure 19, *c*. Beneath these a much broken vessel of Rust Red, rough ware containing cremated bones.

Burial R–24.—Similar to R–14.

Burial R–26.—Similar to R–12, although the larger vessel was less elaborately decorated and the dish serving as a cover had a band of red along the rim.

Alta Verapaz, Guatemala, 107
Alvarado, 89, 90, 91, 96, 101, 106, 108, 129
Animas. *See* Las Animas.
Archaic question, The, 124
Archaic Tres Zapotes figurines, 84–101
  classic types, 84–85
  grotesque variants, 88
  major types, 97
  tabulation, 125
  transitional types, 86
Archeological zone, Tres Zapotes, 1–6
Arevalo. *See* Finca Arevalo.
Arroyo Group, 3, 12
  Long Mound (C), 13
  Mound B, 14
  Mound F, 14
  Mound G (the Stone Platform), 13
  Mounds I and J, 15
  Plaza, the, 12
Arroyo Guasimal, 97, 103, 108
Arroyo Hueyapan, 1
Atotonilco, 103
Aztec, 82, 104, 116, 117, 122, 132
  remains, 131
Baby-faces and masks, Olmec style, 90, 126
Bird effigies, 108
Birds and reptiles (figurines), 109
Black-on-Dubonnet Red ware, 30
Black-on-Rust Red ware, 30
Black ware, 17–18, 20–21, 26–27, 55, 68, 69, 115
  Coarse, 14
  Incised, 7, 12
  Polished, 6, 69, 73, 74, 129, 130
  Sculptured, 12
Boca San Miguel, 119
British Honduras, 61, 64, 71, 74, 90, 91, 94, 101, 104, 113, 127
Brown-and-Black ware, 31
Brown-on-White ware, 30
Brown ware, 12, 18, 101, 122
Burials, inventories of representative, 139
  zone of the, Ranchito Group, 7
Cabeza Colosal, 2, 6, 91, 92 (ftn.), 126
Cabeza Group, 2, 6
  Cabeza Colosal, 2, 6, 91, 92 (ftn.), 126
  Mound B, 2
  Mound E, 6
Cacalilao, 94
Campeche, 104, 105, 106, 124, 128
Caso, Dr. Alfonso, xiii, 82, 127
Caso's Zapotecan C glyph, 12, 130
Cassedy, Edwin G., xiii
Cayo District, 101
Cempoala, 89, 103
Ceramic material, miscellaneous, and work in stone, 112–121
Cerro Chico Zapote, 118, 119
Cerro de las Mesas, 105, 106, 130
Cerro Montoso, 122, 127, 128, 129, 131
Chiapas, 91
Cholula, 115, 122, 127, 129, 131
Ciuacoatl, Aztec goddess, 104
Classic archaic figurines, Beatific type, 85
  Pointed-Chin type, 84
  Prognathous type, 84
  Rectangular-Face type, 85
Clay objects, miscellaneous, 116–118
Coati-mundi (whistles), 10, 109
Cobán, Guatemala, 103, 107
Cocijo, 97, 126, 130
Cocuite, 107
Copán, 71, 72, 113, 117, 127
Copilco-Zacatenco, 125
Corozal District, British Honduras, 101
Costa Rica, 82, 109, 127
Covarrubias, Miguel, xiii, 92
Coyotlatelco, 102
Cuicatlán, 129
Cuicuilco-Ticomán, 125
Cuilapan, 103, 131
Dark Brown Sculptured pottery, 12
Dark Brown ware, 10, 12, 28, 73
Dead-leaf Brown ware, 21
Death mask (figurine), 114
Deities, Early (figurines), 97
  Middle American (figurines), 102–103
Dichrome wares, 19, 57, 124
Dresden Codex, 11, 113
Dubonnet Red-and-Dark Brown ware, 30
Dubonnet Red-and-Orange ware, 30
Dubonnet Red-and-Orange-on-White ware, 31
Dubonnet Red-on-White ware, 30
Dubonnet Red ware, 29
Du Solier, Wilfrido, xiii, 57
Early deities (figurines), 97
Ear spools, rings, and beads, 117
Effigy handles, 112
  necks, 112
El Remolino, 106
El Salvador, 88, 89, 103
El Tajín, 57, 62, 113, 129
Etla, State of Oaxaca, 115, 131
Excavations, The, 6–16
Fat God of the Toltecs (figurine), 105
Figurine bodies, 98–100
  bifurcated-leg type, 98
  club-legged, steatopygous type, 100
  seated figures, 99
  simple, unadorned, standing type, 99
  with tripod support, 99
Figurines. *See* Tres Zapotes figurines.
Finca Arevalo, 101

Forms, distribution of according to ware, general Ranchito collection, 68
Fragments, special pottery and figurine, 112–116
limb, explanation of large number of, 116
Galena, 121
Gray ware, 23, 55, 56, 65, 66, 68, 73, 115
Polished, 122, 126, 130
Gropp, Arthur E., xiii
Gualupita, 91
Gualupita I, 93, 94
Gualupita II, 93, 104
Guasimal. *See* Arroyo Guasimal.
Guatemala, 81, 90, 91, 103, 107, 108, 109
Guerrero, State of, 92, 102
Gutiérrez, Ricardo, xiii
Handles, general Ranchito collection, 68
Hay, Clarence, xiii
Herzog, Dr. George, xii
Hidalgo, State of, 57
Holmul I, 81
Honduras, 92, 103, 109, 126
Huaxteca, Huaxtecs, 89, 93, 94, 102, 115, 122, 127, 131, 133
Tres Zapotes relations with the, 131
Instruments, tubular, 110
Island of Jaina, 105, 128
Island of Sacrificios, 103
Jade, 10, 120
Jaina, Island of, 105, 128
Jetkoff, Alexis, xiv
Jiménez Moreno, Prof. Wigberto, 132
Kaminaljuyu, 103
Kinichahau, Maya Sun God, 103
Kirchhoff, Prof. Paul, xiii
Labná, Yucatan, 107
Las Animas, 89, 117, 122, 129
La Venta, 91
Los Danzantes, 9, 82, 117, 126, 130
Los Lirios, 118, 119
Lubaantun, 92, 103, 105
Manos, 55
Marquina, Ignacio, xiii
Matacanela, 115
Maya, 72, 85, 101, 103, 104, 105, 106, 107, 108, 122, 126, 128, 130, 133
Old Empire, Tres Zapotes relations with, 127
primitive, figurines and allied types, 100
renaissance, Tres Zapotes relations with, 128
some "Totonac"-Maya comparisons, 107
Mayoid figurines, mold-made, 104–106
Metates, 55, 118
Mexican highlands, 82, 93, 104, 128
Mexico, State of, 97
Mexico-Tenochtitlán, 131
Mexico, Valley of, 82, 88, 96, 102, 122, 125, 128, 132
Middle American deities (figurines), 102
Middle Tres Zapotes A pottery, 16, 122
Middle Tres Zapotes B pottery, 19, 123
Misantla, 89
Mistequilla, 107
Mixtec (Mixteca-Puebla), 68, 83, 115, 122, 131
Mixteca-Puebla culture, Tres Zapotes relations with, 131
Monkeys and miscellaneous mammals (whistles), 110
Monochrome wares, 17, 20, 26
Monte Albán, 71, 102, 110, 130
Monte Albán I, 82, 97, 125, 126
Monte Albán II, 73, 81, 126
Monte Albán III, 73, 130
Monte Albán IV, 78
Monte Albán V, 68, 78
Morelos, State of, 91, 92, 93, 126
types of figurines, 92, 123, 126
Nahua(tlan), 102, 122
Nanchititla, State of Mexico, 97
National Geographic Society–Smithsonian Expedition, xi, xii
Nicaragua, 82, 102, 127, 132
Nochistlán, 131
Noguera, Eduardo, xiii
Nohmul, British Honduras, 101, 104, 105
Normal White ware, 17, 20
Oaxaca, State of, 98, 102, 103, 110, 114, 115, 116, 131
Valley of, 116, 130, 133
O'Brien, Charles E., xiii, 109, 110 (ftn.)
Obsidian, 121
Ocarinas (whistles), 108
Old Empire, 82, 113, 122, 127, 130
Old God (Fire God), in figurines, 93, 103, 107, 115
Olmec question, The, 126
Orange ware, 28
Light, 130
Painted decoration, wares with, 21.
Palenque, 89
Panpipe, xii, 110, 111
Panuco River, 94
Papaloapan, 101, 103, 105, 109, 131
Pink and Yellow wares, 24–25, 65, 66, 106, 108, 110, 115, 139
carved, 11
rough, 55, 68
Playa de los Muertos, 70
Polychrome ware, general Ranchito collection, 56, 131
Porous White ware, 17, 20, 25
Pottery, classification, 16–31
differential features of, 122
Middle Tres Zapotes A, 16, 122
Middle Tres Zapotes B, 19, 123
terminology, xi
Upper Tres Zapotes, 22, 123
Poyinapan, 114
Profiles (figurines), 96
Pseudodichrome wares, 21–22, 29, 56, 129
Pseudotrichrome wares, 22, 30–31, 56
Q complex elements, 124
Quetzalcoatl as Ehecatl, god of the wind (figurine), 94, 102, 104
Quimistlán, 103.

Ranchito collection, general, 55–83
decorative techniques other than painting, 69–76
broad, shallow incision, 71
combined techniques, 75
deep incision, 73
fine incision, 60
indented, grooved, and fluted decoration, 74
modeling and filleting, 75
multiple scratching, 73
distribution of forms according to ware, 68
forms and sizes of vessels, 60
handles, 68
miscellaneous and aberrant specimens, 76
Polychrome ware, 56
rim sherds, 60–63, 69, 70, 71, 72
rough Yellow ware, 55, 68
Sculptured ware, 55
sherds with painted decoration, 56
specimens of special value for comparative purposes, 80
spouted vessels, 68
"Stick-polished" ware, 55
support, forms of, 63
Ranchito de las Animas. *See* Las Animas.
Ranchito Group, 3, 7
burials, zone of the, 7
Mound A, 9
Mound C, 9
Mound D and adjacent areas, 10
Mound F, 12
stone fireplace, 12
Mounds J and K, 11
tiger god figurine from Mound D, 10, 104
Ranchito El Pantaño, 89
Red-and-Black-on-White or Cream ware, 31, 131
Red-and-Black ware, 30
Red-and-White Incised ware, 19, 122
Reddish-brown ware, 28, 112
Red ware, 10, 18
Coarse, 6, 12
highly polished, 13, 123
Rough ware, 55, 65, 68
Rust Red ware, 21, 108
rough, 25, 55, 64, 68, 101, 123
smooth, 27, 69
Sacrificios, Island of, 103
Salcajá, 81, 82
San Andrés Tuxtla, 91, 106, 108, 111, 112, 113, 127
See also Tuxtla region.
San Eligio, 90
San José, British Honduras, 71, 74, 127
San José I, 61, 80
San José II, 62, 64
San José IV, 62
San Juanico, 89
San Martín Mountain, 110
San Martín Pajapam Mountain, 97
San Miguel Amontla, 112
Santa Rita, British Honduras, 113
Santiago Ahuitzotla, 112
Santiago Tuxtla, 91, 106
See also Tuxtla region.
Sculptured pottery, 113
Sculptured ware, general Ranchito collection, 12, 55, 113
Seals, 116
Sherds with painted decoration, classification and enumeration, general Ranchito collection, 56
Skeletal material, 7, 9, 12, 13, 114, 139
Sling stones, 119
Smothered ware, 17, 20, 25, 100
Specimens of special value for comparative purposes, general Ranchito collection, 80
Speckled ware, 19, 26, 112, 123
Spinden, Dr. Herbert J., xiii
Spinden, E. S., 129, 130
Spindle whorls and beads, 117
Stairway, Mound E, Cabeza Group, 6
Stela A, 7
Stela C, 97, 126, 127, 133
Stewart, Richard H., xii
"Stick-polished" ware, 55
Stirling, Matthew W., xii, 127
Stone:
fireplace, 12
human figures, 14, 119
manos, 55
metates, 55, 118
objects, minor, 120
objects, miscellaneous, 119
Platform, 13, 76
rings, 119
vessels, 118
work in, 118
yokes, 118
Striated ware, 16, 122
Sun God (figurine), 107
Support, forms of, general Ranchito collection, 63
Tabasco, 101, 107, 116, 124, 128
Tajín. *See* El Tajín.
Talocapan, 114
Tamaulipas, State of, 94
Tarascan, 104
Tenajapam River, 106
Tenochtitlán, 131
Teotihuacán, 55, 82, 90, 102, 103, 112, 116, 128
Tres Zapotes relations with, 128
type figurines, 101
Teotitlán del Camino, 114
Tiger god, figurine of, from Mound D, Ranchito Group, 10, 104
Tillantongo, 131
Tizatlán Tlaxcala, 115
Tlacotalpan, 132
Tlalocs, 12, 97, 102
Toltec, 82, 105, 114, 122, 126, 132
Tonalá, 91, 107
Totonac(s), 11, 82, 92, 101, 103, 104, 105, 106, 107, 113, 124, 126, 129, 130
Totonacapán, 129, 130, 133
Tres Zapotes relations with, 129
"Totonac" figurines, 12, 106
"Totonac"-Maya comparisons, some, 107

Tres Zapotes figurines, 84–111
archaic types, 84–101
reflecting the high cultures, 101–108
types, interrelation of, 89
whistles and musical instruments, 108–111
Trichrome wares, 31, 57
Trocadero, 94
Tuxtla Mountain, 110
Tuxtla region (the Tuxtlas), 1, 89, 105, 108, 109, 112, 114, 115, 116, 127, 128, 130, 132
See also San Andrés Tuxtla *and* Santiago Tuxtla.
Types of Tres Zapotes figurines. *See* Tres Zapotes figurines.
Tzultacás, 101, 104
Uaxactun, Guatemala, xi, 70, 88, 90, 94, 97, 108, 110, 113, 122, 126, 127
Uaxactun I, 61, 125, 126
Uaxactun II, 61, 64, 66
Uaxactun III, 64
Uaxactun type of figurines, 90, 94, 123, 126
Uayab, god of the, 107
Ulua Valley, 72, 90, 91, 103, 109, 113, 116, 127
Unslipped or partially slipped wares, 16–17, 19–20, 23–26
Upper Tres Zapotes pottery, 22, 123
Vaillant, Dr. George C., xiii, 55, 131
Vaillant's A type figurines, 13, 87, 88, 89, 125
Cix type figurines, 93
Di type figurines, 94
K type figurines, 93
Valenzuela, Lic. Juan, xiii, 114
Valley of Mexico. *See* Mexico, Valley of.
Veracruz, State of, 1, 90, 91, 103, 104, 106, 107, 127, 128, 130, 131
Vessels, forms and sizes, general Ranchito collection, 60
spouted, 68
Vessels, stone, 118
Wares, Tres Zapotes:
Black, 17, 20, 21, 26, 55, 68
Coarse, 14
Incised, 7, 12
Polished, 6, 69, 73, 74, 129, 130
Sculptured, 12
Black-on-Dubonnet Red, 30
Black-on-Rust Red, 30
Brown, 12, 18, 101, 122
Brown-and-Black, 31
Brown-on-White, 30
Dark Brown, 10, 12, 28, 73
Sculptured, 12
Dead-leaf Brown, 10, 12, 28, 73
Dubonnet Red, 29
-and-Dark Brown, 30
-and-Orange, 30
-and-Orange-on-White, 31
-on-White, 30
Wares, Tres Zapotes—Continued.
Gray, 23, 55, 56, 65, 66, 68, 73
Polished, 122, 126, 130
Normal White, 17, 20
Orange, 28
Light, 130
Pink and Yellow, 24–25, 65, 66, 106, 108, 110, 115
Polychrome, 56, 131
Red, 10, 13, 18
Coarse, 6, 12
highly polished, 13, 123
rough, 131
Red-and-Black, 30
Red-and-Black on White or Cream, 31, 131
Red-and-Orange, 31
Red-and-White Incised, 19, 122
Reddish-Brown, 28, 112
Rough, 55, 65, 68
Rust Red, 21, 108
rough, 25, 55, 64, 68, 101, 123
smooth, 27, 69
Sculptured, 12, 55, 113
Smothered, 17, 20, 25, 100
Speckled, 19, 26, 112, 123
"Stick-polished," 55
Striated, 16, 122
Unslipped or partially slipped, 16-17, 19–20, 23–26
White-slipped, 65, 66, 69, 112
White (or Cream), 26, 55, 68, 115, 130
Yellow and Pink, 10, 24–25, 65, 66, 106, 108, 110, 115, 139
carved, 11
rough, 55, 68
Weltfish, Dr. Gene, xii
Whistles of the Tuxtla region, 108
White-slipped ware, 65, 66, 69, 112
White (or Cream) ware, 26, 55, 68, 115, 130
"Winged man" type of figurines, 104
Work in stone, Miscellaneous ceramic materials and, 112
Xipe, god of the flayed, cult of, 102
heads, 123
Xiuhtecutli, the fire god (sherd), 115
Xoxo, State of Oaxaca, 110, 131
Yellow and Pink wares, 24–25, 65, 66, 106, 108, 110, 115
Yellow ware, 55, 139
carved, 11
rough, 55, 68
Yopico, 102
Yucatan, 105, 106, 107, 130
Zaachila, 103
Zacatenco, 96
See also Copilco-Zacatenco.
Zapotec(an), 91, 97, 103, 116, 130
Zapotecan culture, Tres Zapotes relations with, 130

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE·
CLASSIC POINTED-CHIN TYPE.

(See text, page 84.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: CLASSIC POINTED-CHIN TYPE.

(See text, page 84.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: CLASSIC PROGNATHOUS TYPE.

(See text, page 84.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: CLASSIC RECTANGULAR-FACE TYPE.

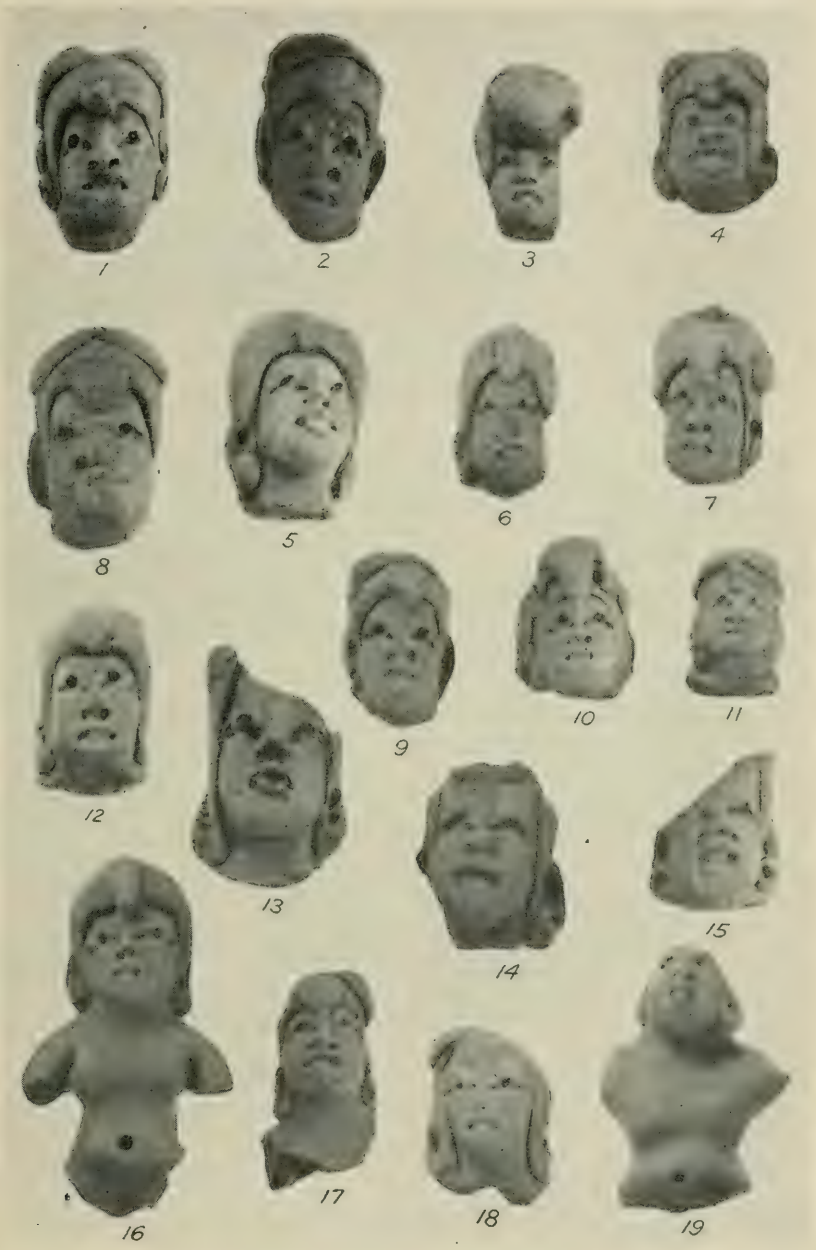
(See text, page 85.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
CLASSIC RECTANGULAR-FACE TYPE.

(See text, page 85)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
CLASSIC BEATIFIC TYPE.

(See text, page 85.)



TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: CLASSIC BEATIFIC TYPE.

(See text, page 85.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
A TYPICAL TRANSITIONAL TYPE.

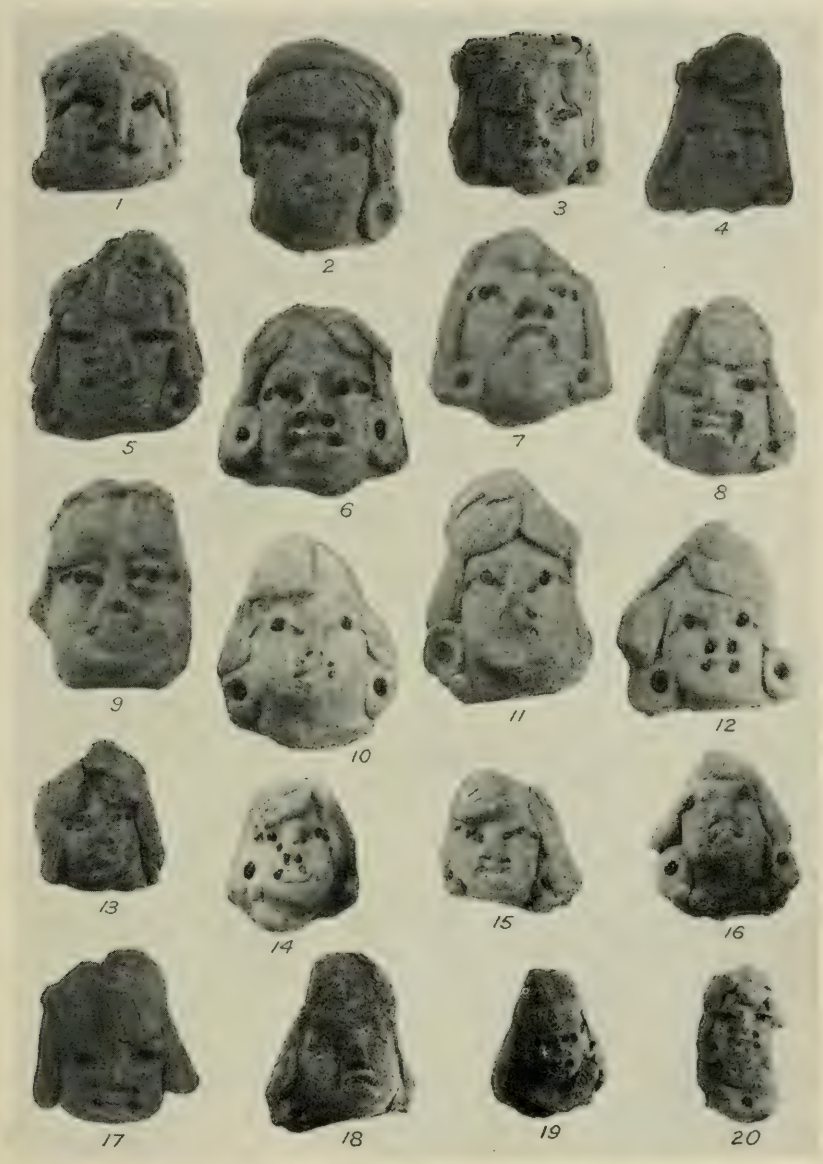
(See text, page 86.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
A TYPICAL TRANSITIONAL TYPE.

(See text, page 86.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
TYPICAL VAILLANT'S TYPE A.

(See text, page 87.)



TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
TYPICAL VAILLANT'S TYPE A.

(See text, page 87.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
TYPICAL VAILLANT'S TYPE A.

(See text, page 87.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: TYPICAL GROTESQUE VARIANTS.

(See text, page 88.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
TYPICAL GROTESQUE VARIANTS.

(See text, page 88.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
INTERRELATION OF TYPES.

(See text, page 89.)

Note gradations left to right.

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
A UAXACTUN TYPE.

(See text, page 90.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
A UAXACTUN TYPE.

(See text, page 90.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: BABY-FACE TYPE.

(See text, page 90.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
BABY-FACE TYPE.

(See text, page 90.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
MORELOS TYPES.

(See text, page 92.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
MORELOS TYPES.

(See text, page 92.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: VARIANTS.

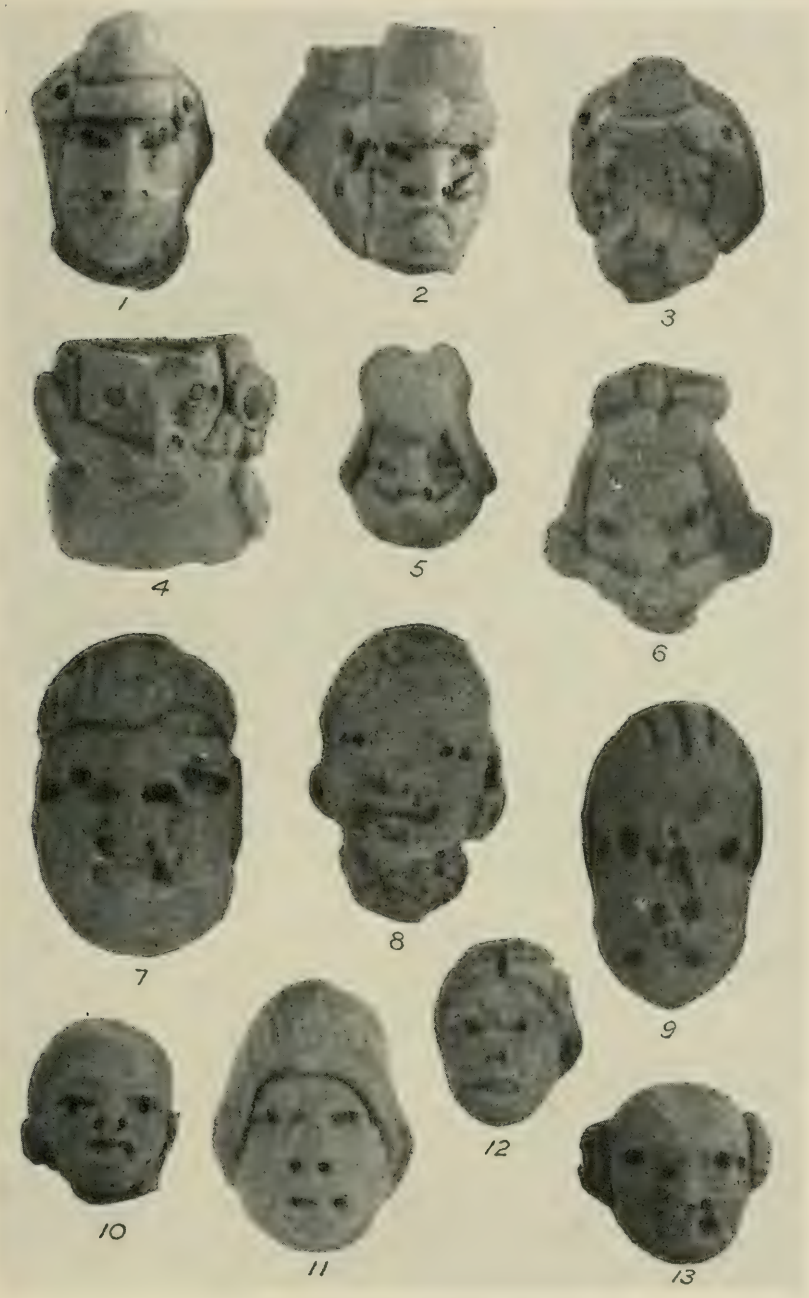
(See text, page 93.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: VARIANTS.

(See text, page 93.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
AN ABERRANT GROUP.

(See text, page 94.)



TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
TWO ABERRANT GROUPS.

(See text, page 94.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
MISCELLANEOUS VARIANT AND ABERRANT SPECIMENS.

(See text, page 94.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
MISCELLANEOUS VARIANT AND ABERRANT SPECIMENS.

(See text, page 96.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: PROFILES.

(See text, page 93.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: EARLY DEITIES.

(See text, page 97.)

TRES ZAFOTES FIGURINES OF ARCHAIC TYPE:
MAJOR ARCHAIC TYPES.

(See text, page 97.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE: UNCLASSIFIED FIGURINES.

(See text, page 98.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
FIGURINE BODIES.

(See text, page 98.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
FIGURINE BODIES.

(See text, page 99.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
FIGURINE BODIES.

(See text, page 99.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
FIGURINE BODIES.

(See text, page 99.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
FIGURINE BODIES.

(See text, page 100.)

TRES ZAPOTES FIGURINES OF ARCHAIC TYPE:
PRIMITIVE MAYA AND ALLIED TYPES.

(See text, page 100.)

FIGURINES REFLECTING THE HIGH CULTURES:
A TEOTIHUACÁN TYPE.

(See text, page 101.)

FIGURINES REFLECTING THE HIGH CULTURES:
SOME MIDDLE AMERICAN DEITIES.

(See text, page 102.)

FIGURINES REFLECTING THE HIGH CULTURES:
MISCELLANEOUS FIGURINES.

(See text, page 103.)

FIGURINES REFLECTING THE HIGH CULTURES:
MOLD-MADE MAYOID FIGURINES.

(See text, page 104.)

FIGURINES REFLECTING THE HIGH CULTURES:
MOLD-MADE MAYOID FIGURINES.

(See text, page 105.)

FIGURINES REFLECTING THE HIGH CULTURES:
MOLD-MADE MAYOID FIGURINES AND MOLDS.

(See text, page 106.)

FIGURINES REFLECTING THE HIGH CULTURES: "TOTONAC" FIGURINES.

(See text, page 106.)

FIGURINES REFLECTING THE HIGH CULTURES:
SOME "TOTONAC"-MAYA COMPARISONS.

(See text, page 107.)

WHISTLES OF THE TUXTLA REGION.

(See text, page 108.)

WHISTLES AND OCARINAS.

(See text, page 108.)

BIRD-EFFIGY WHISTLES.

(See text, page 108.)

WHISTLES AND MUSICAL INSTRUMENTS:
BIRDS AND REPTILES.

(See text, page 109.)

WHISTLES AND MUSICAL INSTRUMENTS:
THE COATI-MUNDI AND UNIDENTIFIED FORMS.

(See text, page 109.)

WHISTLES AND MUSICAL INSTRUMENTS: MONKEYS.

(See text, page 110.)

WHISTLES AND MUSICAL INSTRUMENTS:
MISCELLANEOUS MAMMALS.

(See text, page 110.)

WHISTLES AND MUSICAL INSTRUMENTS:
TUBULAR INSTRUMENTS (INCLUDING A PANPIPE).

(See text, page 110.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS:
EFFIGY HANDLES.

(See text, page 112.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS:
EFFIGY HANDLES.

(See text, page 112.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS: EFFIGY NECKS.

(See text, page 112.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS:
SCULPTURED POTTERY.

(See text, page 113.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS:
AN EFFIGY VESSEL, A FIGURINE, AND A MASK.

(See text, page 114.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS:
MISCELLANEOUS VESSELS, SHERDS, AND POTTERY OBJECTS.

(See text, page 114.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS:
MISCELLANEOUS EFFIGIES.

(See text, page 115.)

SPECIAL POTTERY AND FIGURINE FRAGMENTS:
LIMB FRAGMENTS OF JOINTED AND LARGE HOLLOW FIGURINES.

(See text, page 116.)

MISCELLANEOUS CLAY OBJECTS:
SEALS.

(See text, page 116.)

MISCELLANEOUS CLAY OBJECTS:
SEALS.

(See text, page 117.)

MISCELLANEOUS CLAY OBJECTS:
SPINDLE WHORLS AND BEADS.

(See text, page 117.)

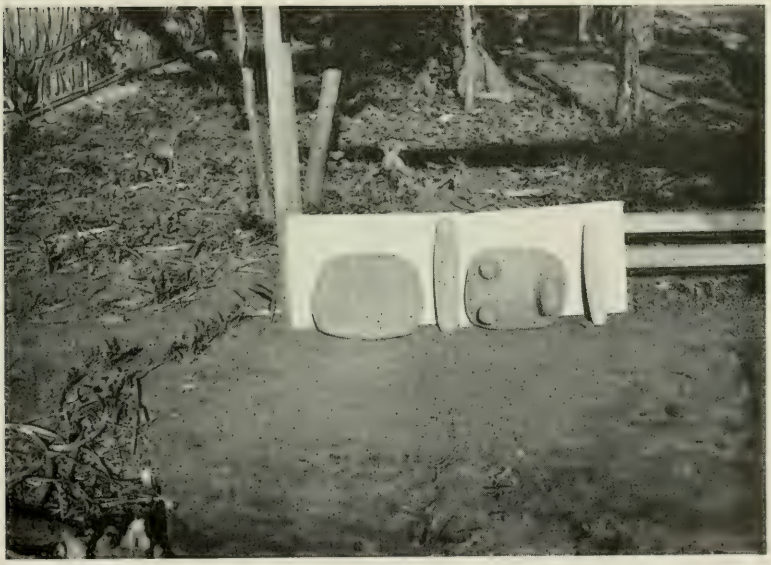
MISCELLANEOUS CLAY OBJECTS:
EAR SPOOLS, RINGS, AND BEADS.

(See text, page 117.)

WORK IN STONE:
YOKES, METATE, AND VESSELS

(See text, page 118.)

1.



2.

WORK IN STONE:
1. CARVED STONE YOKES. 2. METATES.

(See text, page 118.)

WORK IN STONE:
INCOMPLETE YOKE, METATE, VESSEL, AND HUMAN FIGURES.

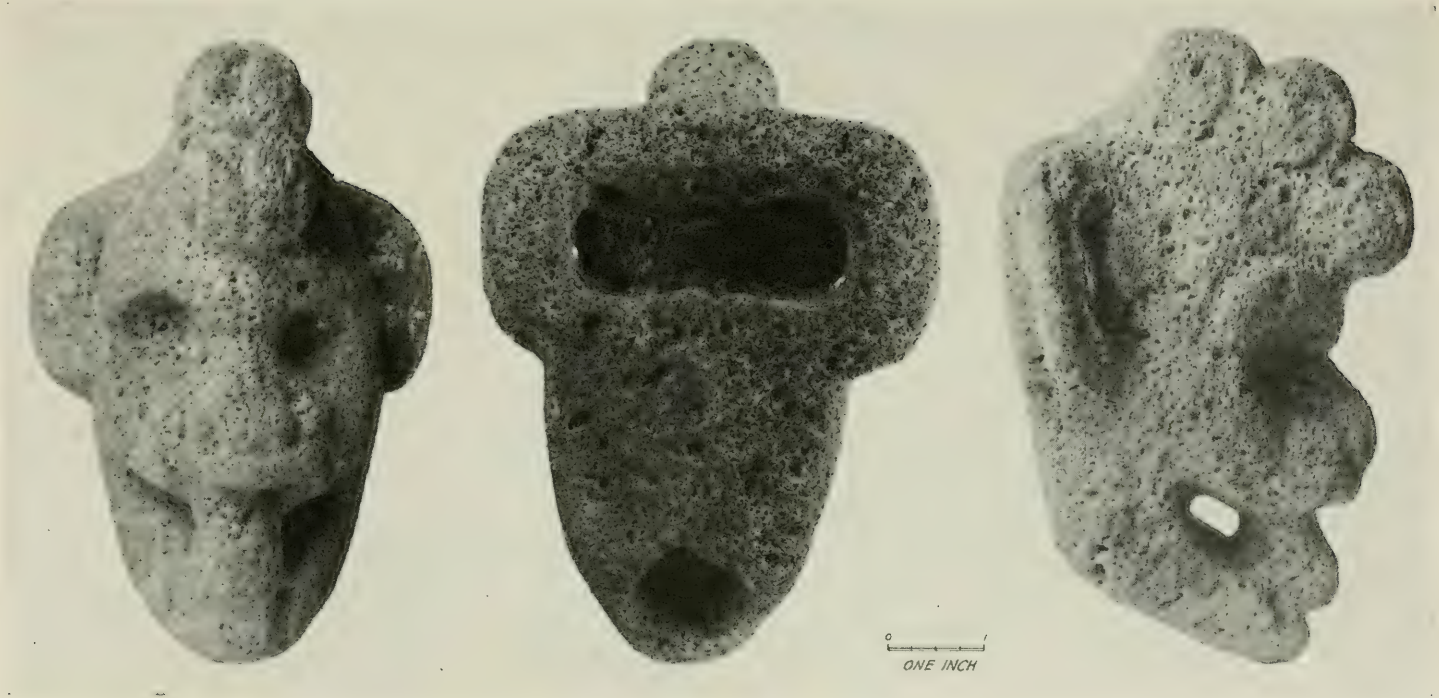
(See text, pages 118, 119.)

WORK IN STONE:
VESSEL, HUMAN FIGURES, "POUNDER," AND SKULL.

(See text, pages 118, 119.)

WORK IN STONE:
STONE RINGS, SLING STONES, AND OTHER OBJECTS.

(See text, page 119.)



WORK IN STONE:
SKILLFULLY CARVED HUMAN FIGURE.

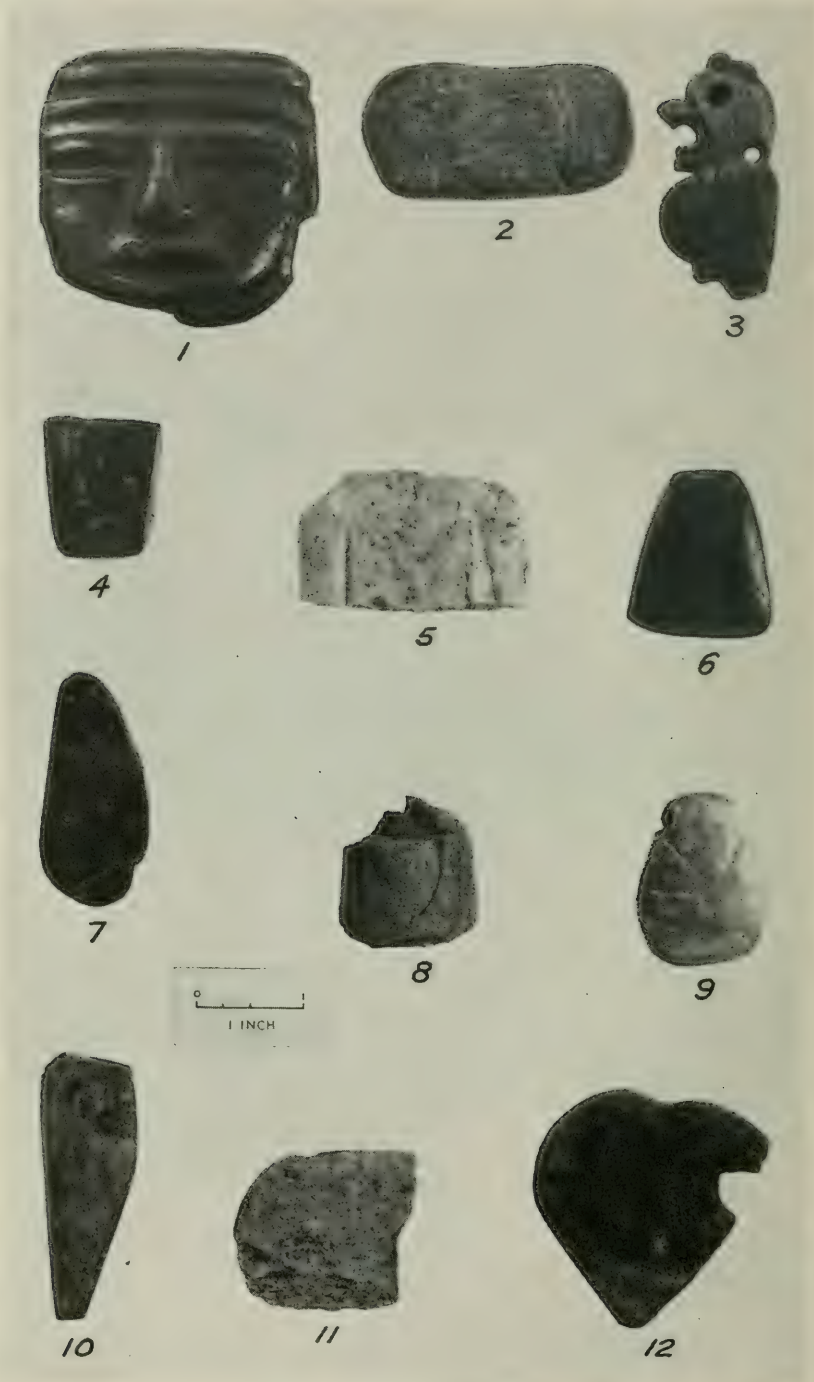
(See text, page 119.)

WORK IN STONE:
BARK BEATERS AND POLISHED CELTS.

(See text, page 120.)

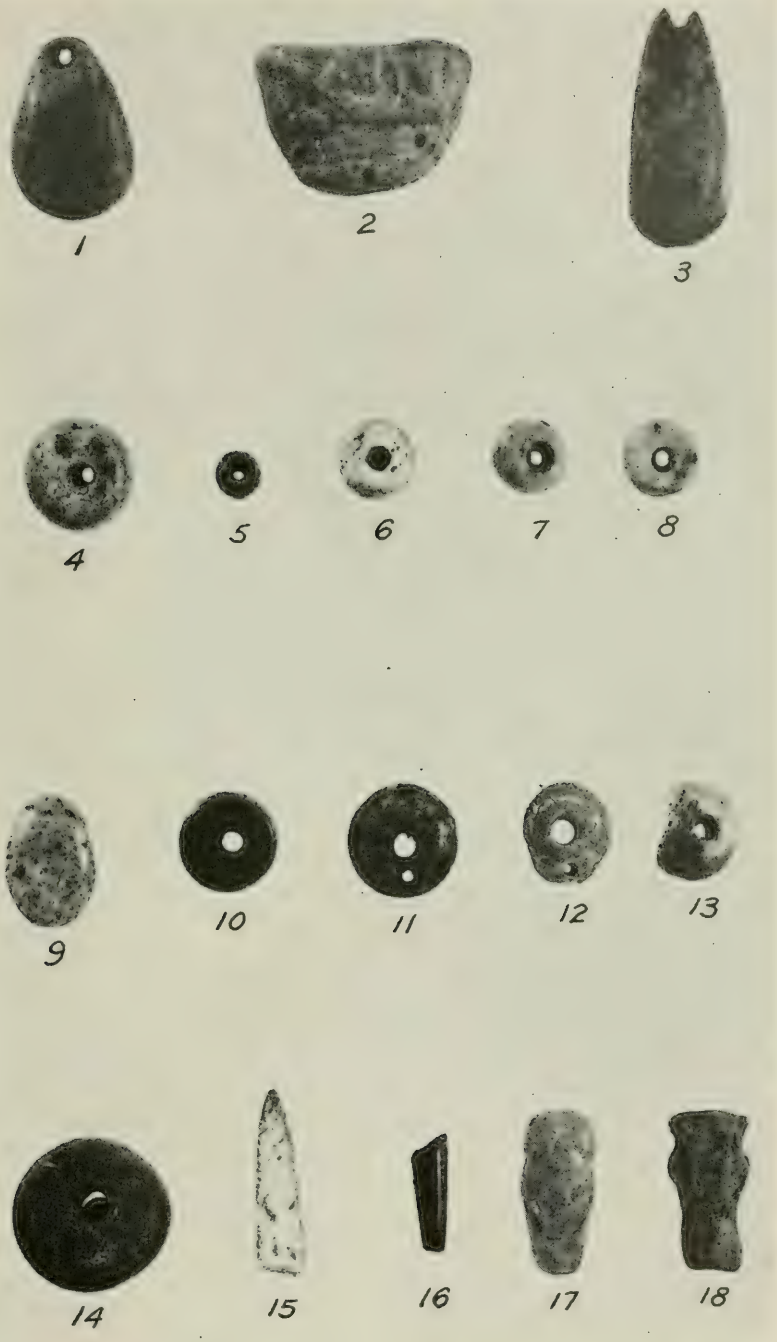
WORK IN STONE AND CLAY:
MISCELLANEOUS STONE AND CLAY OBJECTS

(See text, page 120.)



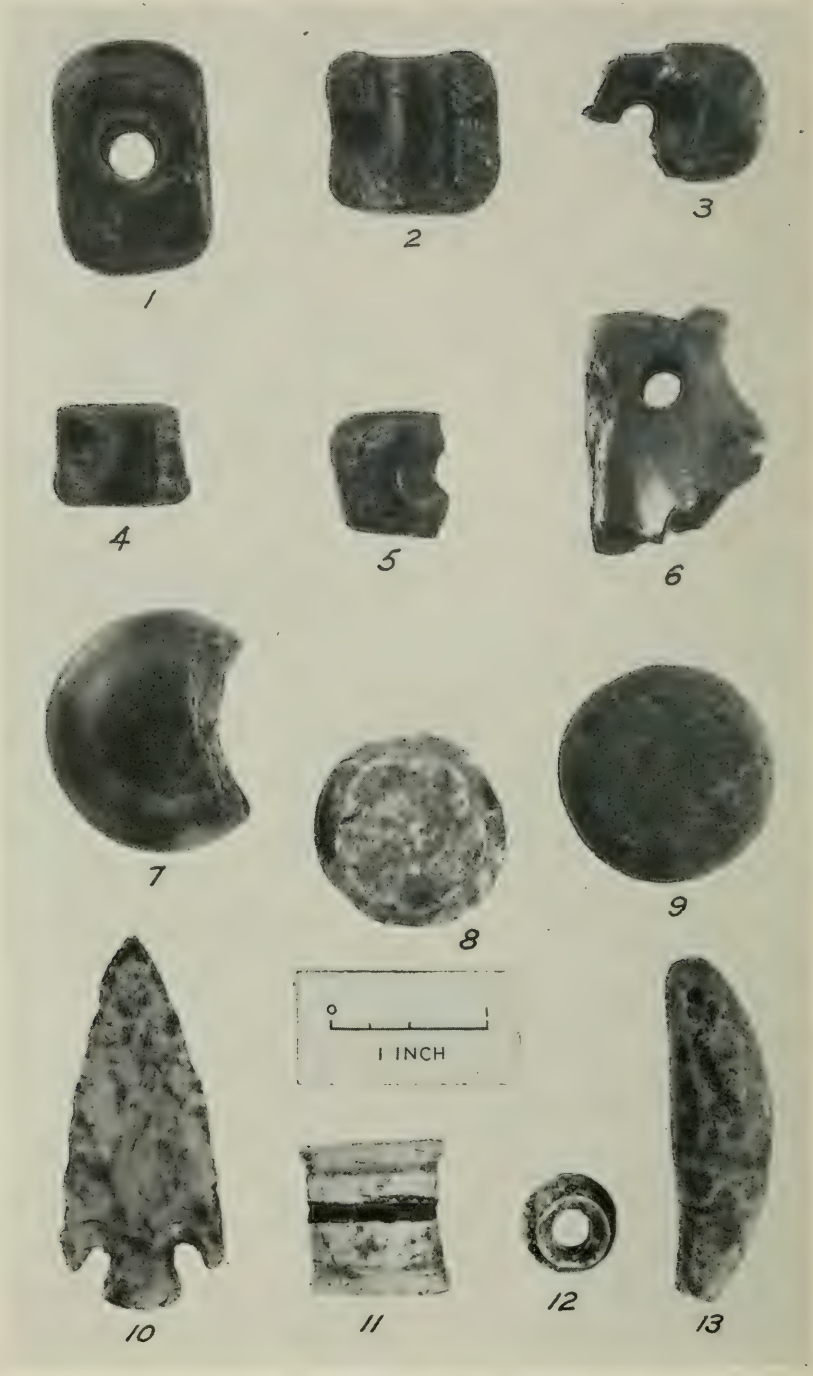
WORK IN STONE AND BONE:
HEAD OF FIGURE, CARVED PARROT, JADE FIGURINE TORSO, JADE CELT, AND OTHER OBJECTS.

(See text, page 120.)



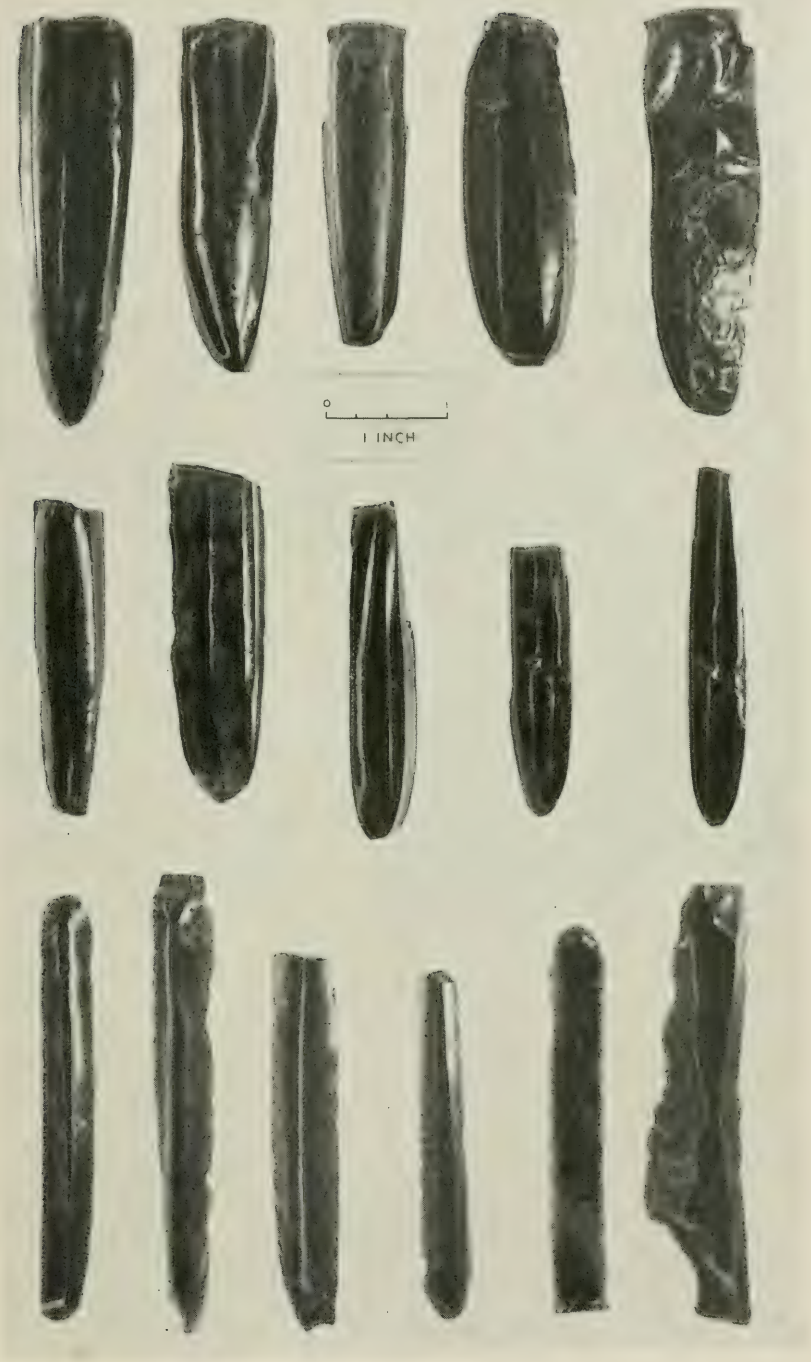
WORK IN STONE:
JADE BEADS, PENDANTS, AND POINTED IMPLEMENTS.

(See text, page 120.)



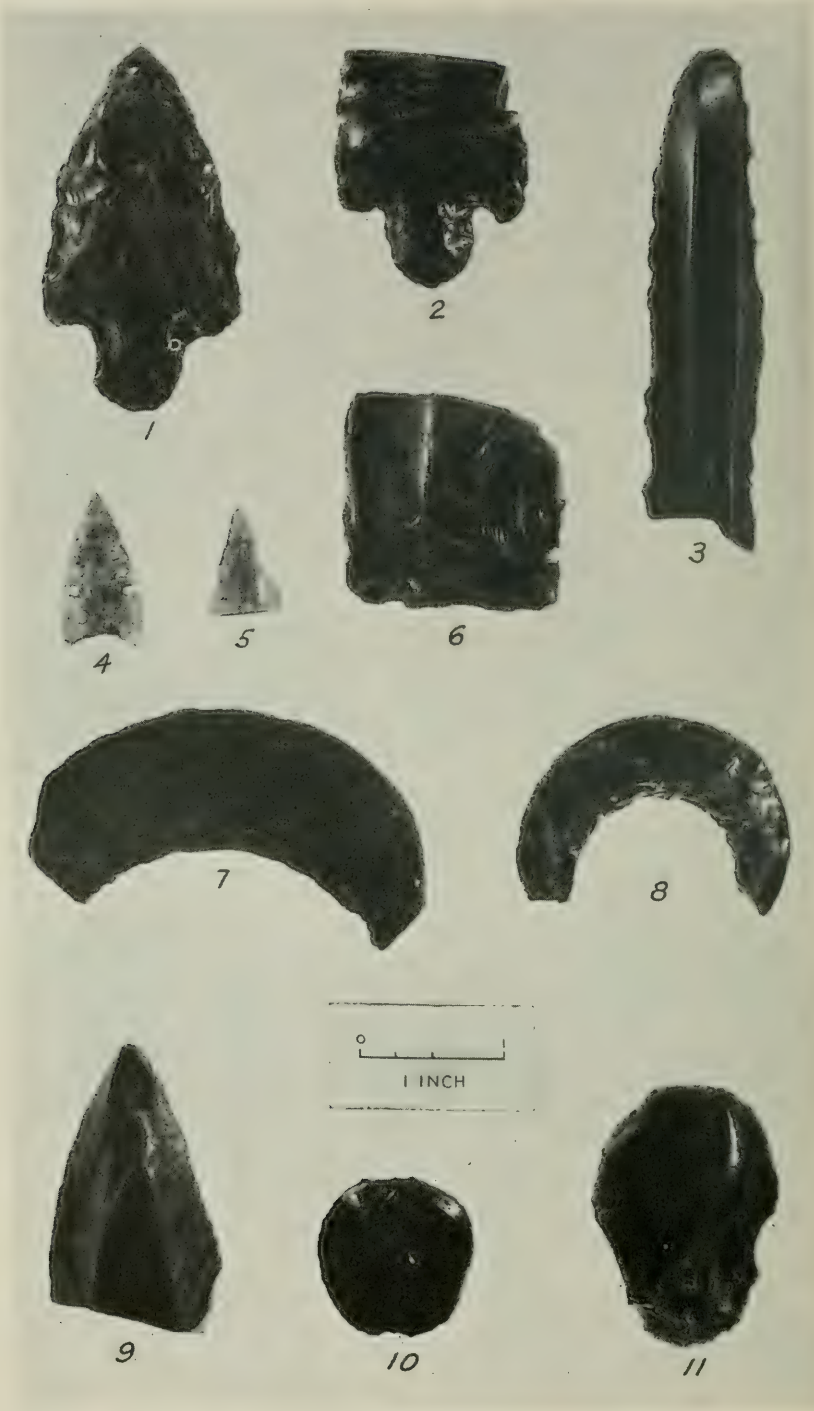
WORK IN STONE:
GALENA SPECIMENS AND OTHER OBJECTS.

(See text, page 121.)



WORK IN STONE:
OBSIDIAN BLADES AND CORES.

(See text, page 121.)



WORK IN STONE:
OBSIDIAN PROJECTILE POINTS AND LUNATE SPECIMENS.

(See text, page 121.)

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